

REPORT

OF THE

DEPARTMENT OF HEALTH

FOR THE

FISCAL YEAR ENDED MARCH 31, 1924

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OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1924

DEPARTMENT OF HEALTH

FISCAL YEAR ENDED MARCH 31, 1924

To General His Excellency the Right Honourable Lord Byng of Vimy, G.C.B., G.C.M.G., M.V.O., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit, herewith, for the information of Your Excellency and the Parliament of Canada the Annual Report of the Department of Health, being for the year ended March 31, 1924.

I have the honour to be, sir,
Your Excellency's most obedient servant,

H. S. BÉLAND
Minister of Health.

OTTAWA, September 1, 1924.



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REPORT
OF THE
DEPARTMENT OF HEALTH

FOR THE FISCAL YEAR ENDED MARCH 31, 1924

OTTAWA, August 28, 1924.

Hon. H. S. BÉLAND, M.D.,
Minister of Health,
Ottawa.

SIR.—I have the honour to report on the Department of Health for the year ended March 31, 1924, under the following headings:—

1. Quarantine Service (including Leper Stations).
2. Immigration Medical Service.
3. Marine Hospitals Service.
4. Venereal Disease Control.
5. Housing, with Hospitalization and Sanitation.
6. Opium and Narcotic Drugs.
7. Proprietary or Patent Medicines.
8. Child Welfare.
9. Food and Drug Laboratories.
10. Public Works Health Act.
11. Pollution of Boundary Waters.
12. Financial Statement.

J. A. AMYOT,
Deputy Minister of Health.

(1) QUARANTINE SERVICE

Organized Quarantine Stations were maintained during the fiscal year at the following ocean ports:—

Charlottetown, P.E.I. (Keppoch),
Chatham, N.B. (Middle Island),
Halifax, N.S. (Lawlor's Island),
Louisburg, N.S.,
North Sydney, N.S.,
Quebec, Que. (Grosse Isle),
St. John, N.B., (Partridge Island),
Victoria, B.C. (William Head).

The following table shows the number of vessels and personnel inspected at the several stations:—

Station	Vessels inspected	Passengers			Crews	Cattlemen	Stowaways	Distressed seamen	Total persons inspected
		Cabin	Inter-mediate	Steerage					
Charlottetown, P.E.I.	5				49				49
Chatham, N.B.	18				340				340
Halifax, N.S.	398	14,157	8,500	32,997	37,676	84	41	24	93,479
Louisburg, N.S.	39	10		1	1,367				1,378
North Sydney, N.S.	97	15			3,050		9		3,074
Quebec, Que.	862	4,303	36,088	86,198	71,313	587	169		198,658
St. John, N.B.	288	2,805	4,868	23,510	27,774	86	33	10	59,086
Victoria, B.C.	427	8,257	3,537	19,627	41,013				72,434
Totals.....	2,134	29,547	52,993	162,333	182,582	757	252	34	428,498

REPORT
OF THE
DEPARTMENT OF
HEALTH
FOR THE FISCAL YEAR ENDED
MARCH 31, 1925

Hon. H. S. Stewart, M.P.
Minister of Health
Ottawa

I have the honor to report on the work of the Department of Health under the following heads:

1. Quarantine Service (including ships)
2. Immigration Medical Service
3. Marine Hospital Service
4. Venereal Disease Control
5. Working with Hospitalization and Sanatoriums
6. Quins and Venereal Drugs
7. Propagation of Venereal Diseases
8. Child Welfare
9. Food and Drug Laboratories
10. Public Health - Health Act
11. Pollution of Boundary Waters
12. Planned Parenthood

The following table shows the number of vessels inspected at the several stations:

CHARLOTTEVILLE

The following table shows the number of persons inspected at the several stations:

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Persons to the number of 758 were detained at Quarantine Stations. Of these, 189 were actually sick; the remainder, 569, either accompanied the sick or were contacts of the respective diseases. These latter include a large number detained for observation at the William Head Quarantine Station from vessels arriving with smallpox on board.

DISTRIBUTION IN HOSPITAL AND DETENTION BUILDINGS, BY STATIONS

Station	Sick	Hospital days	Contacts and persons accompanying sick	Detention period in days	Total persons detained	Total days in hospital and detention quarters
Halifax, N.S. (Lawlor's Island)...	32	407	36	460	68	867
Quebec, Que. (Grosse Isle).....	127	1,435	219	1,849	346	3,284
St. John, N.B. (Partridge Island)	19	190	48	378	67	568
Victoria, B.C. (William Head)...	11	155	266	1,806	277	1,961
Totals.....	189	2,187	569	4,493	758	6,680

DISTRIBUTION IN HOSPITAL AND DETENTION BUILDINGS, BY DISEASES

Diagnosis	Sick	Hospital days	Contacts and persons accompanying sick	Period of detention in days	Total persons detained	Total days in hospital and detention quarters
Acute cold*	16	98	7	43	23	141
Biliousness*	1	7	2	14	3	21
Bronchitis*	4	31	2	16	6	47
Chickenpox.....	29	475	34	472	63	947
Coryza*	1	2	1	2	2	4
Dental abscess*	1	4	2	8	3	12
Diarrhoea*	1	5	.....	.....	1	5
Diphtheria.....	1	7	7	49	8	56
Drug rash*	1	7	.....	.....	1	7
Dysentery.....	1	4	1	4	2	8
Enteric fever.....	2	85	.....	.....	2	85
Erysipelas.....	5	93	3	12	8	105
Food rash*	2	9	4	20	6	29
Gastritis*	1	4	1	4	2	8
Impetigo*	2	11	1	3	3	14
Measles.....	57	600	116	1,061	173	1,661
Mumps.....	9	68	17	94	26	162
Peritonitis*	1	8	2	16	3	24
Pneumonia*	1	15	.....	.....	1	15
Pyrexia (unknown origin).....	9	39	28	119	37	158
Refusing vaccination.....	.....	.....	5	35	5	35
Rhinitis*	1	3	.....	.....	1	3
Scabies*	9	94	3	36	12	130
Scarlet fever.....	4	127	11	207	15	334
Smallpox.....	11	216	267	1,841	278	2,057
Sore throat*	2	14	3	12	5	26
Teething*	1	5	3	15	4	20
Tonsillitis*	10	88	33	238	43	326
Typhus fever.....	2	50	6	129	8	179
Urticaria*	1	4	6	24	7	28
Vaccinia.....	2	8	1	4	3	12
Vincent's angina*	1	6	3	15	4	21
Totals.....	189	2,187	569	4,493	758	6,680

* These cases were landed at Quarantine for observation on account of pyrexia, indicating possible infectious disease. Conditions were later diagnosed as stated.

Commencing with the opening of navigation on the St. Lawrence river in the spring of 1923, the quarantine inspection base was transferred from Grosse Isle to Father Point, the quarantine officer now going on board vessels at the same time as the pilot. Any vessel found to have quarantinable or minor infectious disease on board was ordered to stop at Grosse Isle for the discharge of the sick and contacts. This new arrangement, together with the now established practice of clearing vessels passing Father Point during the night, on the sworn statement of the captain and ship's medical officer that the passengers and crew are free from quarantinable or other infectious disease, aids materially in the expeditious movement of vessels steaming up the St. Lawrence river.

The following extracts are from reports received from the respective quarantine officers:—

Grosse Isle, Quebec (Medical Superintendent, Dr. G. E. Martineau).—"The quarantine inspection of vessels arriving by the St. Lawrence, which had taken place at Grosse Isle since the year 1886, was this year carried out at Father Point, the steamers stopping at Grosse Isle only when they had cases of contagious disease to land, or when, for one reason or another, they could not be cleared at Father Point. For this purpose the assistant medical superintendent here was transferred to Father Point as quarantine officer in charge, and a fourth medical officer was appointed for service there, also a cabin steward to care for the doctors. Two residences were purchased at Father Point for the accommodation of the medical quarantine officers and their families.

"Eight hundred and sixty-two vessels arrived at Father Point which required inspection, and of these all but twenty were granted pratique there immediately on arrival. Of the twenty which passed Father Point without pratique, eighteen were cleared here, one at Chicoutimi and one at Levis, the two latter having passed quarantine on account of misunderstanding and the inspection boat being out of commission.

"Of these 862 steamers inspected, 142, or about 16 per cent, were passenger vessels, the remaining 720 being freight boats, ninety-two of which, however, carried from one to thirty-seven passengers, and one carrying 63.

"The total of 198,658 persons passing quarantine this season shows an increase of 56,457 over last year in the number of passengers, although the number of passenger steamers this year was thirteen fewer than that of last year. This marked increase is made up almost entirely of passengers travelling third-class, who numbered 32,837 in 1922, as compared with 86,198 in 1923, an increase of 53,361.

"Infectious diseases were reported or discovered on inspection fifty-nine times. The diseases so reported or discovered included typhus, smallpox, scarlet fever, diphtheria, measles, erysipelas, mumps, enteric fever, and pyrexia for observation. On several occasions steerage passengers refused to allow the ship's surgeon to vaccinate them or their children, but allowed the quarantine officer to do so.

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“Deaths and births occurring on board ships during the voyage were recorded as follows:—

Name of Vessel	Number of deaths	Cause of deaths	Number of births
Man. Regiment.....	1	Bronchitis.....	
Regina.....	1	Tuberculosis.....	
Megantic.....	1	Bronchitis.....	
Keyingham.....	1	Peritonitis.....	
Marloch.....	1	Epilepsy.....	
Metagama.....	1	Pulmonary œdema.....	
Marburn.....	1	Pneumonia.....	
Delaware.....	1	Accident.....	
Bruton.....			3
Totals.....	8		3

“The ss. *Swiftsure*, *Conia* and *San Macedonia* coming from Tampico, Mexico, where smallpox was reported to be present at the time they sailed, in May last, were ordered to call at Grosse Isle for final pratique and completion of fourteen days from the date of departure as required by the regulations.

“Following is a table of vessels arriving at Father Point with suspicious or positive cases of major quarantinable diseases on board and sent to Grosse Isle for diagnosis or necessary action to be taken:—

Name of Vessel	Date arrived	Suspected disease	Disease diagnosed	Pratique granted
Canadian Logger.....	May 21.....		Alastrim.....	May 23
Montrose.....	June 30.....	Smallpox.....	Varicella.....	June 30
Regina.....	July 1.....	Typhus.....	Measles.....	July 1
Megantic.....	July 8.....	Smallpox.....	Varicella.....	July 8
Montcalm.....	Oct. 12.....	Typhus.....	Measles.....	Oct. 12
Empress of France.....	Nov. 7.....	Typhus.....	Typhus.....	Nov. 9
Montlaurier.....	Nov. 24.....	Smallpox.....	Varicella.....	Nov. 24

“The Government Merchant Marine steamer *Canadian Logger* arrived at Grosse Isle from Barbados, May 21, with a case of alastrim among her crew of twenty-seven. The bill of health mentioned five cases of alastrim at St. Lucia where she had touched. All members of crew who had been landed to be disinfected, together with their baggage, bedding, etc., were detained for quarantine and observation with the exception of two who had had smallpox. The steamer having been thoroughly disinfected was permitted to proceed on the 23rd in charge of a new crew sent down from Montreal for that purpose. The members of crew detained under observation having been vaccinated and revaccinated were released as soon as evidence of successful vaccination appeared or definite immunity reaction manifested itself; that is, seventeen on May 29, six on June 2, and one on June 5. The patient under treatment at the hospital was discharged as cured on June 16.

“The ss. *Empress of France* from Southampton via Cherbourg with 83 cabin, 129 intermediate, 739 steerage passengers, and 492 crew, arrived at quarantine at 1 p.m., November 7, with a case of high pyrexia and rash, very suspicious of typhus fever, among foreign steerage passengers. The patient, a child of five years old, with six members of her family, were immediately removed from the ship and hospitalized at the station, and the Weil-Felix test was made to ascertain the condition before allowing the vessel to proceed. Although the Weil-Felix test was negative, the clinical symptoms and history of the case were found so pathognomonic that we could not but conclude the pres-

ence of typhus fever, the Typhus Research Commission of the League of Red Cross Societies to Poland reporting a failure of the test in 3 to 3.6 per cent of the cases, and Leonard Rogers in as many as 10 per cent. The 397 steerage passengers occupying the section of the ship where the case had developed and the forty-one crew attending to these were therefore landed at the Western Division of the station for quarantine and observation; and the fumigation of the emptied section and hospitals, of a cubic capacity of 133,000 feet, was carried out at once by burning 413 pounds of sulphur. All intermediate and remaining steerage passengers on board were also examined, but being found free from vermin, and not having been exposed to infection, they were permitted to proceed with the steamer, which left quarantine at 1.45 a.m., November 9. No new cases developed among the detained passengers and crew in the Western Division and, consequently, they were released on November 20 after having taken a disinfecting bath on arrival and having had all their personal effects, baggage, etc., thoroughly disinfected. One birth occurred during the detention, and it was necessary to transfer a female contact to the hospital for a case of abortion.

"Six hours after landing a secondary case of typhus fever developed at the hospital among the children of the family detained under observation for typhus, but it was of a milder form than the original case, which recovered slowly. This secondary case was able to leave the hospital with the rest of the family on December 1.

"The total number of days during which the above passengers and crews were detained is as follows:—

SS. Canadian Logger.....	206
SS. Empress of France.....	5,256
Total.....	5,462

"The following cases of measles were overlooked on inspection at Father Point, or developed on the journey to Quebec, where they were found on arrival and returned to the station on the quarantine boat:—

Name of Vessel	Date	Disease	Number of cases	Number of contacts
Regina.....	July 28.....	Measles.....	3	7
Regina.....	Aug. 25.....	".....	2	3
Montclare.....	Nov. 10.....	".....	1	2
Total.....			6	12

"Vaccinations at the station were carried out during the year as follows:—

Staff and dependents.....	74
Crew of ss. Canadian Logger.....	29
Persons detained at hospital.....	3
Total.....	106

"The persons admitted to the hospital were divided as follows with regard to their nationality:—

British.....	212	Flemish.....	5
German.....	22	Belgian.....	5
Russian.....	20	Hungarian.....	4
Polish.....	16	American.....	4
Russian-German.....	12	Greek.....	4
Roumanian.....	10	Jugo-Slav.....	4
Canadian.....	8	Swiss.....	4
Swedish.....	7	Tcheko-Slav.....	2
Finnish.....	6	Norwegian.....	1

Total..... 346

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“ Six cases of chickenpox, five of measles, and one of typhus fever developed among the contacts detained under observation at the hospital. Of the chickenpox cases two developed nine days, three eleven days, and one fifteen days after landing. Three cases of measles developed almost on admission, one two days, and one three days afterwards. The case of typhus fever developed six hours after landing. All these cases had been disinfected and isolated on admission to hospital with the exception of three cases of measles which showed symptoms of the disease on admission, and another measles case who was too young to be separated from the mother.

“ One birth occurred in the Western Division during the detention of passengers ex ss. *Empress of France*. No deaths were recorded at the station during the year.

“ Besides urine examinations done at the hospital, the undermentioned chemical and bacteriological examinations were done at the laboratory:—

Swabs (nose and throat).....	10
Sputum.....	3
Blood for enteric fever.....	5
Blood for typhus fever.....	5
Water (chemical analysis).....	13
Water (bacteriological analysis).....	1
Fæces.....	2
Total.....	39”

Lawlor's Island, Halifax, N.S. (Acting Quarantine Officer, Dr. Judson V. Graham).—“ There was one death at the hospital during the year—a child being held for deportation at the Immigration building as a Mongol imbecile, developed chickenpox, was transferred to the quarantine hospital, where it died of septiemia.

“ A female passenger refusing vaccination, not having been previously vaccinated, was taken to the station to complete the detention required by the regulations, but after three days' detention, at her request, she was vaccinated and released.

“ The ss. *Caronia* arrived here on July 21, reporting two cases of smallpox in the third-class. The first case was discovered by the ship's surgeon on July 16, with the rash well developed. The case and family, nine in all, were immediately isolated in the ship's hospital. The second case developed in the same family, July 20, the rash appearing July 21.

“ The first-class passengers were permitted to proceed the same day and the third-class passengers destined to Canada, numbering 400, including the two sick cases, were disembarked into quarantine the following day, July 22. The delay in disembarking the third-class passengers was occasioned by the ship's agents requesting that the proposed action be submitted to Ottawa for confirmation before any passengers were disembarked into quarantine. On disembarking the passengers destined to Canada, the ship sailed for New York without being released from quarantine.

“ The 398 passengers landed into quarantine were vaccinated on July 22 (among whom were four who had never been previously vaccinated), also the attendants which accompanied them. It was necessary to revaccinate fifty of these, the first vaccination not showing a satisfactory reaction. On appearance of immunity reactions or successful takes, the passengers were released from quarantine, with the exception of the sick and their immediate families.

“ The ss. *Cedric* arrived at quarantine on March 8, the ship's doctor reporting that they had rejected three steerage passengers suffering from smallpox, at the time of embarkation at Liverpool. These three cases were picked up when crossing the gangway and were immediately isolated in one of the ship's hospitals until embarkation was completed, when they were put ashore again. The ship's surgeon took all necessary precautions on the voyage, vaccinating

all the steerage passengers with the exception of twenty-two who refused to submit to it. These twenty-two with four members of their families accompanying were landed into quarantine to complete the period of detention required under the regulations. However, on explaining to these passengers why the ship's surgeon wished to vaccinate them, they requested that it be done at this station, and were all vaccinated by me. They were released as soon as a satisfactory reaction showed or the required period of detention was completed.

"Including the passengers and attendants quarantined from the ss. *Caronia*, but exclusive of the quarantine staff and their families, there were 476 vaccinations performed at this station during the year, with the following results: Positive takes, 61; immunity reactions, 398. The remaining 17 left before the result could be determined.

"In accordance with the regulations, the entire quarantine staff and the members of their families resident at the station were vaccinated in February, with the exception of one child who was successfully vaccinated last year, and four who are protected by previously having had smallpox. The results showed as follows: Positive takes, 3; immunity reactions, 26."

William Head, Victoria, B.C. (Quarantine Officer, Dr. C. P. Brown).—
"There were twenty-five sufferers from the Japanese earthquake disaster ex the ss. *President Jefferson* landed here September 15. They were all British. This station co-operated to the best of its ability in housing and caring for them. Mr. Skinner, of the Immigration Department, attended to them for that department, chiefly transportation. Mrs. Fleming arranged the Red Cross assistance especially in outfitting and securing them positions. Hon. Mr. Oliver, Premier of British Columbia, had Colonel Ross Napier visit them to arrange any assistance that could be extended from the province. Miss Williams, trained nurse, who assisted Mrs. Fleming, was very kind indeed, staying here constantly without pay. Three families remained in Canada. The last left the station on October 24.

"Buildings generally have all been in use this year. They have been found to be in fit condition for occupation and use and well suited to the needs. The routine repairs have been carried out by our own staff, with materials purchased by the Public Works Department. Some minor alterations have been made which have added to their efficiency, the most important being the installation of additional washing accommodation in the second-class detention building and the oriental steerage quarters. Some needed furniture has also been supplied.

"Major Quarantines: The epidemic of smallpox on the Asiatic coast has been severe and virulent. Five vessels, three passenger and two freighters, have brought smallpox. The procedure followed with these has been, to determine the location of the disease among the passengers and crew, and decide which classes of passengers and what part of the crew were to be regarded as sufficiently close contacts to warrant detention. Then inspect these and land those not having been successfully vaccinated within one year or having had smallpox. Next, inspect all the rest on board and vaccinate those who come under above category. Fumigate the quarters where the patient has been. As soon as the patients and detentions with stores and supplies are landed, release the vessel. This was followed with the *Empress of Australia* and *Asia* with a delay of about three and one-half hours each. The *Canada* had a larger passenger list and all the oriental steerage was landed to save delay. But it was found they could have been inspected on board as quickly. With the freighter *Capto* it was necessary to delay the vessel until sufficient of the crew were found immune by the vaccination reaction to operate the vessel. The *Kurdistan* had enough men vaccinated recently to allow the vessel to proceed with less than three hours' delay.

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" In this connection the department authorized the enforcing of Section 29 of the Regulations on vessels coming from San Pedro, Cal., as from January 31, 1924. As a consequence, two vessels arrived and were detained for vaccination. By the immune reaction it was possible to release them in twenty-four hours.

" Our difficulty in the quarantines referred to above has been to read accurately the results of the vaccinations carried out on board by the ships' surgeons. Their difficulty has been in enforcing the vaccination of all members of the crew, especially a large Chinese crew. They are overcoming this by careful records of vaccinations performed. We have tried to have them do the vaccinations in the approved intracutaneous way with control, and keep records accordingly. By doing this here we have been able to cut the period of detention short and lessen the number detained.

" In connection with the smallpox situation it should be reported that last September outbreaks of smallpox were occurring among the Indians of this coast, and the suspicion was that Indians returning from Washington State from hop-picking were bringing it with them. I consulted with Hon. Dr. Young, Provincial Officer of Health for British Columbia, and as a consequence our department had the immigration authorities segregate all returning Indians on landing from the coastwise boats for inspection by the immigration medical officer, and vaccinate if needed. Dr. Milne at Victoria did this from September 12 to November 23, vaccinating 271.

" Attention is also drawn to the number of vessels arriving with bills of health showing the presence of quarantinable disease. Smallpox was shown at San Pedro, San Francisco, Philadelphia, Rio de Janeiro, Algiers, Tokyo, Kobe, Shanghai, and Hongkong. Plague was shown at Singapore, Hongkong, Shanghai, Paita, Callao, Sourabaya. Typhus was shown at Algiers, Sourabaya and Samarang.

" An attempt was made this past winter season to lessen the delay occasioned vessels through waiting at the station for daylight. Vessels were accordingly inspected after sundown, freighters till 6 p.m., and passenger boats on providing approved lights and conditions until 9 p.m.; all vessels at 6 a.m. This has been found satisfactory so far as it goes. Roughly there were 123 vessels waited at the anchorage an average of six hours each during the year. Of course it is not meant by this that all of these vessels suffered financial drawback; many of them did not, in so far as they waited subsequently for berth or cargo.

" The total number of vessels inspected this year, 427, as compared with 285 last year, shows an increase of 50 per cent. The diversified nature of the traffic is shown by the nationality of the vessels, the British predominating with 46 per cent of the total:—

British.....	196
Japanese.....	111
American.....	69
Norwegian.....	26
Danish.....	10
Dutch.....	7
Spanish.....	3
Italian.....	2
French.....	1
Nicaraguan.....	1
Panamanian.....	1

" The wharves at the quarantine station have had constant supervision by Mr. Ford, District Engineer, Public Works Department. He has had extensive repairs carried out on both wharves, especially the small one. This was found in very bad condition and will need more extensive repairs as soon as possible.

The dolphin at the outer end of the big wharf was injured last December during the docking of the *Canada*. This has been the subject of special report and recommendation. Mr. Ford's staff have also kept supervision of the water system and assisted with such repairs as our own staff could not handle."

LEPER STATIONS

Leper stations or lazarettos in Canada are two in number, one at Tracadie, N.B., of which Dr. J. A. Langis is the superintendent, and one on the Pacific coast at Bentinck Island, B.C., in charge of Dr. C. P. Brown, the quarantine officer at William Head.

Lazaretto, Tracadie, N.B.—The number of patients in this institution at the close of the fiscal year was ten, viz., six males and four females, as compared with eleven at the close of the previous year, one patient having died on March 13, 1924, in the last stage of the disease. No new cases were admitted during the twelve-months period under review. The oldest inmate is age 78, and the youngest, 23. Seven are native of Tracadie, N.B., and surrounding country, all French Acadians; one Chinese, one of French and Scotch descent, and one Icclander. The following extract is from Dr. Langis' report:—

"Patients reported last year as arrested cases, with one exception, are enjoying the same good health and are contented. The last one to be admitted, October 6, 1922, is so much improved that we expect to return him to his family some time during next fiscal year.

"With our youngest patient we had to stop the intramuscular injections of the Dean Derivatives, 'H.I.', in November last, on account of leprosy fever, which has some similarity to hectic fever. This girl is decidedly ill and willing to remain in bed. We have in this case what some authors call papular leprosy, and according to their experience, though there is close resemblance to the original leprosy nodes, they are not real nodules, and are free of organism. We therefore, in this particular case, expect to resume the treatment with 'H.I.' as soon as this fever stops.

"My experience with Dr. Pomaret's arsenical preparation 'Eparseno' is not what I expected, after reading about its great value in the hands of Professor H. Gougerot, Dr. Pomaret and others. But I derive some consolation from what Professor Jeanselme, the President of the Third International Congress of Leprosy, held in Strasbourg in 1923, says: 'Results obtained by the use of Amino-Arseno-Phenol, "Eparseno," ought to be submitted to a severe test, and a longer experimentation is necessary before judging of the merit of this medicine.' The same gentleman has about the same observation through the use he made himself of the Ethyl Esters of Chaulmoogra Oil, and the poor results he had with four of his leper patients. My oldest patient after two years treatment with 'H.I.' had a relapse about ten months ago, and at my suggestion, accepted the arsenical compound, of which we had such laudable reports in the treatment of leprosy. The first injection, $\frac{1}{2}$ c.c., on the 2nd of October, was also given to another male patient, age 52 years, who though faring well on the 'H.I.' treatment, begged to be treated with 'Eparseno'. Instructions were strictly followed, but within two months, after 23 c.c. had been injected, the old man got worse. The other patient developed a good size gluteal abscess after the eighteenth injection and stopped taking it with no apparent results. Since February he resumed the 'H.I.' injections. This is my first experience with an abscess consequent to hypodermic, intravenous and intramuscular therapy to my leper patients in fifteen years.

"A director of the Investigation Station, United States Public Health Service, Kalihi Hospital, Honolulu, recently wrote: 'Leprosy is such a slow,

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chronic disease, so insidious and sluggish in its attack, and heretofore, at least, so stubbornly rebellious to therapy, that it taxes all the powers of patience and courage both in its victim and his medical attendant. Advantage has to be taken of every helpful measure for the maintenance of a steady, persistent and unflagging course of treatment which knows no faltering and no discouragement.' And also as Dr. Isadore Dyer, Dean of Tulene University, Louisiana, has aptly said: 'Above all things individualize the leper patient; watch for improvement. If it does not show in three months, wait a year and longer. Keep on driving at the treatment until the patient dies or gets well.' Since the Tracadie Lazaretto has had a resident physician, this in 1896, this practise has been followed. We have two men on parole, the first since 1898, and the other since 1912. Both are in the same good health as when they left the Institution. In our wards we presently have six arrested cases, who could go on parole if they were capable of looking after themselves; but they are all more or less impotent.

"I regard it a pleasant duty to express my gratitude to the staff of the lazaretto who have co-operated so diligently in the welfare of the lepers."

Lazaretto, Bentinck Island, B.C.—At the close of the fiscal year there were seven leper patients under treatment at this colony, viz., five Chinese, one Russian Jew, and one Doukhobor. These are classified by Dr. Brown as follows: Disease checked, four; active, but improving under treatment, two; commencing treatment, one.

During the year the lepers were transferred from D'Arcy Island to the new leper station at Bentinck Island, following its construction by the Department of Public Works. The new station is much more easily accessible from the Quarantine Station at William Head, being but three miles distant, whereas D'Arcy Island is thirty miles away. This ensures close oversight of the leper colony by the medical officers of the Quarantine Station.

Two new cases of leprosy were discovered in Western Canada during the year, and prompt arrangements were made for their removal to the lazaretto.

One Chinese patient who had spent several years under treatment at D'Arcy Island was released on parole on August 22, 1923, as free from leprosy infection, following his examination by a medical board consisting of Dr. C. P. Brown, medical superintendent of the Quarantine Station, Dr. H. E. Young, Provincial Officer of Health for British Columbia, Dr. F. F. Underhill, Medical Officer of Health for Vancouver, and Dr. R. L. Fraser, of Victoria. On returning for re-examination on March 29, 1924, Dr. Brown found a reappearance of symptoms which had previously disappeared, which led him to require the man's readmission for a further course of treatment.

Dr. Brown reports that the condition of both the new cases admitted during the year shows encouraging improvement under the treatment being administered, and concludes his report by an appreciative reference to the faithful service rendered during the year by the lazaretto staff.

(2) IMMIGRATION MEDICAL SERVICE

At the large ocean ports of Canada at which immigrants regularly arrive, there are stationed officers of the Immigration Medical Service whose business it is to medically inspect each and every newly-arriving immigrant, also other passengers of the non-immigrant classes referred to in section 2 of the Immigration Act, exclusive of returning Canadians. Those found mentally or physically defective to a marked degree are "certified" as prohibited of entry under one or other of the subsections of sections 3 of the Immigration Act, and they then pass under the jurisdiction of an officer of the Department of Immigration for disposal.

The Immigration medical officer's work consists of detecting persons who come within the following classes of prohibited immigrants as set out in the Immigration Act:—

(1) Idiots, imbeciles, epileptics, feeble-minded or insane persons—Section 3 (a).

(2) Persons affected with tuberculosis or other contagious or loathsome disease which is not curable within a reasonably short time—Section 3 (b).

(3) Immigrants who are dumb, blind, or otherwise physically defective to a degree rendering them liable to become a public charge—Section 3 (c).

(4) Persons of constitutional psychopathic inferiority—Section 3 (k).

(5) Persons with chronic alcoholism—Section 3 (l).

(6) Persons (other than those stated above) who are mentally or physically defective to such a degree as to affect their ability to earn a living—Section 3 (m).

Passengers, immigrant and non-immigrant, to the number of 138,241 were medically inspected at the Atlantic and Pacific ports of Canada during the fiscal year, which is an increase of 71,761 over the figures for the previous year. In addition, 8,169 persons bound to Canada via the ports of New York and Boston were medically inspected by officers of the United States Public Health Service.

IMMIGRANTS AND NON-IMMIGRANTS MEDICALLY INSPECTED AT OCEAN PORTS

Month	Quebec		Halifax		St. John		Montreal		Vancouver		Victoria		North Sydney		Sydney		New York and Boston		Totals
	Immigrants	Non-Immigrants	Immigrants	Non-Immigrants	Immigrants	Non-Immigrants	Immigrants	Non-Immigrants											
1923-24																			
April	9,256	864	2,097	169	4,678	219	58	82	210	55	63	770	300	498	149	8,220			
May	9,442	978	2,840	327	1,978	199	12	167	461	110	93	829	264	485	98	18,042			
June	9,632	1,030	2,94	66	10	94	44	148	318	57	91	829	264	812	102	13,653			
July	16,477	2,215	4,403	155	13	108	60	148	488	84	156	284	271	871	131	14,559			
August	9,578	958	339	786	13	71	36	129	194	43	39	773	289	767	139	26,467			
September	8,608	740	218	178	5	77	44	108	92	70	14	628	425	1,297	103	13,968			
October	8,392	451	667	90	15	26	23	153	88	60	21	643	249	737	45	11,850			
November	.....	.....	1,874	66	3,040	196	95	30	20	25	9	517	153	717	43	11,242	
December	.....	.....	1,628	108	1,611	150	.....	62	102	28	16	213	137	365	40	6,144
January	.....	.....	2,397	179	2,434	129	.....	43	48	10	9	40	67	207	48	3,970
February	.....	.....	5,812	208	5,521	223	.....	26	52	47	15	21	15	203	38	5,556
March	.....	.....	.....	.....	.....	.....	.....	83	116	65	16	229	26	229	45	12,736
Totals	71,385	7,236	23,669	2,388	19,323	1,527	557	241	1,179	2,159	654	542	4,947	2,196	123	7,188	981	146,410	

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The following table shows the number of persons medically certified:—

Section 3, subsection (a)—Mentally defective.....	38
Section 3, subsection (b)—Tuberculosis or loathsome disease.....	49
Section 3, subsections (c) and (m)—Physically defective.....	1,278
Section 3, subsection (k)—Constitutional psychopathic inferiority.....	13
Section 3, subsection (l)—Chronic alcoholism.....	2
Total certified.....	1,350

Tables below show, by ports, the specific mental and physical diseases or defects for which these persons were certified.

IMMIGRANTS "CERTIFIED" BY MEDICAL OFFICERS UNDER SECTION 3 OF THE IMMIGRATION ACT.

SUBSECTIONS (a) AND (k)—MENTALLY DEFECTIVE

Disability	Quebec	Halifax	St. John	Montreal	Victoria	North Sydney
<i>Subsection (a)—</i>						
Epileptics.....	1	3	1	1		
Feeble-minded.....	8	1	3			
Idiots.....		1				1
Imbeciles.....	1		1			
Insane.....	9	2	1	2	1	1
<i>Subsection (k)—</i>						
Constitutional psychopathic inferiority.....	7	5	1			
Totals.....	26	12	7	3	1	2

SUBSECTION (b)—PERSONS AFFLICTED WITH LOATHSOME OR CONTAGIOUS DISEASE

Disease	Quebec	Halifax	St. John	Montreal	Victoria	Vancouver
Gonorrhoea.....	6	3			4	
Psoriasis.....	1					
Ringworm.....		3	3			
Sycosis barbae.....		2				
Syphilis.....	1			1		
Trachoma.....	8	1	2		4	2
Tuberculosis.....	2	2	2	2		
Totals.....	18	11	7	3	8	2

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SUBSECTIONS (c) AND (d)—PERSONS PHYSICALLY DEFECTIVE

Defects	Quebec	Halifax	St. John	Montreal	Vancouver	North Sydney
Abscesses	3					
Absence of members	60	21	43			1
Alcoholism, chronic (ess. H.)	2					
Anemia	1	1				
Blindness, total or partial	7	1		1		
Blood vessels, defects of	32	4	7	1		
Chest disorders	5	5				
Chorea	2					
Deafness	72	9	23	1		
Deaf and dumb	8	2	6			
Debility	2	21				
Deformities	35	23	15	1		1
Dermatites	3		3			
Ear, diseases of	3		2			
Enteroptosis			1			
Epileptiform seizures	3					
Eye, diseases of	2		2			
Glandular conditions		1	5			
Goitre	3		3			
Gun shot wounds		7	10			
Heart conditions	57	1	15			
Hernia	32	12	15	2		
Hydrocele	2	2	1			
Jaundice, chronic		1				
Joints, diseases of	3		2	1		
Kidney conditions	2	1				
Lack of physical development	4	3				
Locomotor ataxia	2					
Loss of power of members	215	15	92			
Loss of tissue			1			
Malaria	6		1			
Malignant growths	1					1
Nervous system, diseases of	5	2	3			
New growths	1					
Paralysis	7	5	2	1		1
Poor physique	3	1	4			
Pregnancy, illegitimate	7					1
Rheumatism	10	1				
Senility	1	21	6			
Speech, impediments of	19	4	8			
Stomach, diseases of	1					
Torticollis	1	1				
Ulcer, chronic		1				
Uterine hemorrhage					1	
Vision, defects of	144	6	57		1	
Totals	766	172	327	8	2	5

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The following table shows the number of ocean passengers (immigrant and non-immigrant) who, on arrival in Canada, were detained for medical or surgical treatment:—

Treated for	Quebec	Halifax	St. John	Montreal	Vancouver	Victoria
Abscess	4	5	2	1		
Anthrax	1					
Appendicitis	1					
Bronchitis	5	4	3		1	
Cellulitis	2	2		2		
Chancroid					1	
Child-birth	3					
Cystitis	1					
Debility			2			
Dental periosteitis	3					
Digestive system	1		*4			
Dislocations	1					
Ear, diseases of	1		1			
Eye, diseases of	11	11	4		8	7
Fractures	1	2	1			
Gonorrhoea						4
Gout	1					
Infected members	4	2	5			
Influenza	1		5			
Injured members	1					
Jaundice		1				
Laryngitis		1	1			
Miscarriage		1	2			
Pneumonia	4	*3	1			
Poisoning			†1			
Pregnancy			1			
Pyrexia		2	8			
Ringworm	1	3		2		
Scald	1					
Sinus	1					
Skin diseases	30	14	22		7	25
Sprain	3		1		....
Synovitis	1					
Tonsillitis	2	1	2			
Trachoma				4		4
Tuberculosis			*2	†1	1	
Tumor					1	
Ulcer	2	1				
Urinary system			†1			
Varicella	1					
Wound		1	3			
Totals	88	54	72	10	19	40

†Died; *1 died.

Of the immigrant and non-immigrant ocean passengers detained for a closer medical examination than could be afforded during line inspection, on account of suspected mental or physical defects, the following number were respectively either recorded as having minor physical defects not sufficiently serious to bring them within the "prohibited classes" set out in Section 3 of the Immigration Act, or were released as "negative":—

Port	Recorded and released	Released as negative
Quebec	756	53
Halifax	202	35
St. John	157	51
Montreal		5
Vancouver		1
Totals.....	1,125	145

(3) MARINE HOSPITALS SERVICES

During the year 1923-24 the Department of Health operated two Marine Hospitals, namely at Sydney and Lunenburg in Nova Scotia. Sick mariners arriving at these ports and outports in the vicinity are therefore directed to these hospitals. At the larger ports where there are hospital facilities, sick mariners are treated at these hospitals at fixed contract rates. At some where there is occasional need for hospital treatment, the department arranges with some suitable private residence. At all other ports best arrangements are made under the authority and direction of the collectors of customs.

The following is a list of the hospitals under contract with this department:

NOVA SCOTIA

Amherst.....	Highland View Hospital
Antigonish.....	St. Martha's Hospital
Bridgewater.....	Dawson Memorial Hospital
Glace Bay.....	St. Joseph's Hospital
Halifax.....	Victoria General Hospital
	City Health Board (Contagious diseases)
	Tuberculosis Hospital
Kentville.....	Nova Scotia Sanatorium
Middleton.....	Soldiers' Memorial Hospital
New Glasgow.....	Aberdeen Hospital
North Sydney.....	Hamilton Memorial Hospital
Pictou.....	Pictou Memorial Hospital
Springhill.....	Springhill Cottage Hospital
Windsor.....	Payzant Memorial Hospital
Yarmouth.....	Yarmouth Hospital

NEW BRUNSWICK

Bathurst.....	James H. Dunn Hospital
Campbellton.....	Hotel-Dieu Hospital
Chatham.....	Hotel Dieu
Moncton.....	Moncton Hospital
River Glade.....	Jordan Memorial Sanatorium
St. John.....	General Public Hospital
	County Hospital (T.B.C. cases)
St. Stephen.....	Chipman Memorial Hospital
Tracadie.....	Hotel-Dieu

PRINCE EDWARD ISLAND

Charlottetown.....	Charlottetown Hospital
	P.E.I. Hospital
Summerside.....	Prince County Hospital

QUEBEC

Chicoutimi.....	Hotel-Dieu
Lake Edward.....	Lake Edward Sanatorium
Levis.....	Hotel-Dieu
Montreal.....	Montreal General Hospital
	Notre-Dame Hospital
	Hotel-Dieu
	Royal Victoria Hospital
	St. Paul's Hospital (Contagious diseases)
	Alexandra Hospital (Contagious diseases)
	Grace Dart Home (T.B.C. cases)
Quebec.....	Hotel-Dieu
	Jeffery-Hale's Hospital
	Civic Hospital (Contagious diseases)
	Laval Hospital (T.B.C. cases)
Sorel.....	Hôpital General
St. Jean.....	Hôpital St. Jean
Three Rivers.....	Hôpital St. Joseph

BRITISH COLUMBIA

Anyox.....	Anyox General Hospital
Chemainus.....	Chemainus General Hospital
Cumberland.....	Cumberland General Hospital
Ladysmith.....	Ladysmith General Hospital
Nanaimo.....	Nanaimo General Hospital
New Westminster.....	St. Mary's Hospital
Ocean Falls.....	Ocean Falls Hospital
Port Alberni.....	West Coast General Hospital
Powell River.....	St. Luke's Hospital
Prince Rupert.....	General Hospital
Tranquille.....	Tranquille Sanatorium
Vancouver.....	St. Paul's Hospital
Victoria.....	St. Joseph's Hospital Royal Jubilee Hospital

Emergency hospitals were operated at the following ports:—

Nova Scotia.—Arichat, Canso, Liverpool, Lockport, Louisburg.

Prince Edward Island.—Souris.

Quebec.—Port Alfred.

It is gratifying to report that during the year there was no epidemic of contagious diseases; only a few isolated cases were reported. However, there has been a marked increase in the shipping activities during the year just ended, as instanced by the large increase in the amount of Sick Mariners' Dues collected. This increase was more especially noticeable at the ports of Halifax, Montreal, Vancouver and some other ports in the province of British Columbia. As a matter of fact, shipping was even greater than in pre-war years. Consequently, the Marine Hospitals Service had to deal with a larger number of sick, injured and distressed mariners than heretofore and the expenditure was proportionately increased.

During the past year the total number of sick, injured and distressed who were looked after by this Service was 2,745, as compared with 2,035 in the previous year, or an increase of 710. It is apropos to mention that as the amount voted by Parliament was insufficient to cover payment of the whole expenditure for the year, a considerable number of accounts had to be transferred to the year 1924-25 for payment. Had the parliamentary vote been sufficient to cover all the expenditure incurred during 1923-24, the total number of sick mariners would then have been 2,985.

Concerning the days of treatment in hospitals and private residences, they number 30,646, as compared with 32,679 in the previous year. Apparently there was a decrease in the number of days, but for the reason here above given, accounts covering treatment for 3,403 days were paid out of the year 1924-25. The correct number of days of hospital treatment given in the year was therefore 34,049, or an increase of 1,370 days on the previous year.

Very few changes were made in the personnel during 1923-24. The Marine Hospitals at Lunenburg and Sydney underwent certain necessary repairs and improvements, and were operated very satisfactorily. Readjustments were made in the salaries of some of the port physicians and also in the contract rates with the various hospitals. The policy of providing necessary and proper treatment to mariners suffering from incipient tuberculosis, which was initiated in the year 1922, was pursued during the year just ended, and the service has now complete and satisfactory arrangements for the treatment of such cases on both the Atlantic and Pacific coasts.

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Following are tabulated statements of the diseases and injuries for which mariners received treatment during the year:—

STATEMENT SHOWING DISEASES AND INJURIES FOR WHICH MARINERS RECEIVED TREATMENT DURING THE YEAR 1923-24

General Diseases—

505

Measles.....	6
Diphtheria.....	2
Smallpox.....	3
Chickenpox.....	1
Scarlet fever.....	3
Typhoid fever.....	20
Paratyphoid.....	3
Erysipelas.....	6
Tuberculosis.....	26
Malaria.....	8
Syphilis.....	93
Gonorrhœa.....	92
Scabies.....	11
Toemia.....	2
Alcoholism.....	1
Diabetes.....	4
Rheumatism.....	77
Bari beri.....	2
Anaemia.....	7
New growths—	
Malignant.....	6
Non-malignant.....	3
Malformation.....	4
General debility.....	14
Cyst.....	15
Neurasthenia.....	7
Influenza.....	87
Parasites.....	1
Shock.....	1

Local Diseases—

Diseases of the Nervous System.....		77
1. Of the nerves.....	17	
Neuritis.....	17	
2. Of the Spinal cord and membranes.....		3
Degeneration of lateral column.....	3	
3. Of brain and membranes.....		1
Inflammation.....	1	
4. Functional and other nervous diseases.....		56
Paralysis.....	1	
Hemiplegia.....	4	
Epilepsy.....	8	
Vertigo.....	3	
Neuralgia.....	21	
Congestion brain.....	1	
Insomnia.....	1	
Mania.....	1	
Headache.....	5	
Chorea.....	2	
Hysteria.....	2	
Psychosis.....	2	
Ptomaine.....	3	
Cerebral hemorrhage.....	2	
Diseases of the eye.....		46
Conjunctivitis.....	28	
Dacryocystitis.....	1	
Ulcer cornea.....	4	
Iritis.....	9	
Galucoma.....	2	
Trachoma.....	1	
Cataract.....	1	
Diseases of the ear.....		43
Cerumen.....	11	
Otitis.....	21	
Mastoiditis.....	8	
Deafness.....	3	
Diseases of the nose.....		13
Rhinitis.....	4	
Abscess.....	2	
Epistaxis.....	2	
Coryza.....	5	

STATEMENT SHOWING DISEASES AND INJURIES, &c.—Continued

Circulatory system.....		26
Valvular heart disease.....	16	
Endocarditis.....	2	
Myocarditis.....	3	
Tachycardia.....	1	
Arteriosclerosis.....	1	
Oedema.....	1	
Phlebitis.....	2	
Respiratory system.....		206
Bronchitis.....	81	
Tracheitis.....	66	
Pneumonia.....	10	
Broncho-pneumonia.....	3	
Laryngitis.....	5	
Congestion lungs.....	3	
Hemorrhage lungs.....	3	
Pleurisy.....	21	
Asthma.....	13	
Abscess lungs.....	1	
Digestive system.....		457
Dental caries.....	84	
Toothache.....	3	
Alveolar abscess.....	1	
Quinsy.....	7	
Pharyngitis.....	3	
Ulcer stomach.....	2	
Gastritis.....	59	
Indigestion.....	40	
Pyorrhoea.....	5	
Cancer stomach.....	1	
Hemorrhoids.....	19	
Fistula.....	3	
Appendicitis.....	55	
Colitis.....	3	
Jaundice.....	6	
Diarrhoea.....	13	
Hepatitis.....	2	
Hernia.....	62	
Constipation.....	19	
Dysentery.....	6	
Enteritis.....	24	
Dyspepsia.....	14	
Hepatic colic.....	3	
Intestinal colic.....	7	
Cholecystitis.....	7	
Ulcer duodenum.....	9	
Diseases of the lymphatic system.....		17
Adenitis.....	17	
Diseases of the urinary system ..		45
Nephritis.....	14	
Pyelitis.....	4	
Renal colic.....	7	
Cystitis.....	16	
Prostatitis.....	2	
Retention.....	1	
Enuresis.....	1	
Diseases of the generative system.....		94
Urethritis.....	14	
Balanitis.....	2	
Stricture.....	8	
Phimosis.....	4	
Paraphimosis.....	6	
Chaneroids.....	12	
Varicocele.....	15	
Hydrocele.....	10	
Orchitis.....	12	
Epididymitis.....	11	

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STATEMENT SHOWING DISEASES AND INJURIES, &c.—Continued

Diseases of the organs of locomotion.....		95
Sciatica.....	4	
Myalgia.....	14	
Lumbago.....	34	
Bursitis.....	9	
Sinusitis.....	1	
Periostitis.....	1	
Osteomyelitis.....	2	
Synovitis.....	7	
Arthritis.....	20	
Necrosis.....	1	
Tabes dorsalis.....	2	
Diseases of the connective tissues.....		206
Cellulitis.....	139	
Abscess.....	67	
Diseases of the skin.....		137
Carbuncle.....	6	
Boils.....	40	
Erythema.....	5	
Herpes.....	3	
Urticaria.....	4	
Dermatitis.....	8	
Whitlow.....	5	
Impetigo.....	8	
Ulcers.....	23	
Eczema.....	23	
Acne vulgaris.....	5	
Phlegmon.....	7	
<i>Injuries—</i>		
General injuries.....		112
Multiple injuries.....	33	
Burns and scalds.....	79	
Local injuries.....		666
Injuries face.....	14	
Contusions.....	56	
Injuries finger.....	42	
Injuries hand.....	55	
Injuries shoulder.....	6	
Injuries upper extremities.....	3	
Injuries eyes.....	10	
Injuries thumb.....	12	
Injuries head.....	32	
Injured back.....	13	
Injuries ribs.....	8	
Injuries chest.....	4	
Fracture nose.....	2	
Dislocation thumb.....	2	
Fracture skull.....	6	
Fracture spine.....	3	
Concussion brain.....	3	
Fracture ribs.....	19	
Foreign body eyes.....	22	
Fracture jaw.....	4	
Fracture femur.....	5	
Fracture tibia and fibula.....	5	
Fracture tibia.....	4	
Fracture fibula.....	1	
Fracture patella.....	2	
Injuries lower extremities.....	3	
Fracture toes.....	4	
Fracture ankle.....	1	
Fracture fingers.....	5	
Fracture wrist.....	1	
Fracture clavicle.....	4	
Fracture hand.....	6	
Fracture foot.....	4	
Fracture arm.....	14	
Fracture scapula.....	1	
Injuries foot.....	39	
Flat foot.....	3	
Injuries abdomen.....	2	
Injuries back.....	1	
Injuries side.....	9	

STATEMENT SHOWING DISEASES AND INJURIES, &c.—*Concluded*Local injuries—*Continued*

Injuries wrist.....	2
Injuries knee.....	20
Injuries arm.....	9
Injuries leg.....	15
Dislocated hand.....	1
Dislocated elbow.....	2
Dislocated finger.....	1
Sprained arm.....	1
Sprained side.....	5
Sprained back.....	7
Sprained leg.....	1
Sprained elbow.....	2
Sprained ankle.....	27
Sprained foot.....	3
Sprained wrist.....	6
Sprained knee.....	5
Sprained neck.....	1
Sunstroke.....	1
Frostbite.....	1
Fatigue.....	1
Gunshot wounds.....	1
Stab wounds.....	1
Malingerer.....	1
Paronychia.....	7
No diagnosis.....	52
Observation.....	39
X-ray examinations.....	24
Total number of seamen treated.....	2,745

(4) VENEREAL DISEASE CONTROL

The venereal disease campaign which was inaugurated in the year 1919 and which has been carried on successfully during the past four years was continued during the past fiscal year. The outstanding feature of the campaign is the free clinic for the treatment of the venereal diseases. During the past year there were fifty-six free venereal disease clinics in operation throughout the country distributed as follows:—

Nova Scotia.....	5
New Brunswick.....	8
Quebec.....	10
Ontario.....	17
Manitoba.....	4
Saskatchewan.....	6
Alberta.....	4
British Columbia.....	2

There are, in addition, a number of subsidiary clinics in women's hospitals, maternity hospitals, child welfare centres, children's hospitals, day nurseries, etc. Treatment is free for all. During the fiscal year there were under treatment in clinics:—

Total cases admitted to clinics.....	12,526
Total cases treated by physicians.....	23,022
Total treatments in clinics and institutions.....	328,963
Total laboratory examinations.....	36,334
Total Wassermann reactions.....	20,932
Total doses of Arsphenamine.....	51,133

Treatment was continued in reformatories and jails throughout the country during the year. With the approval and assistance of General St. Pierre Hughes arrangements were made whereby all prisoners entering penitentiaries are given a Wassermann and smear, and treated if necessary

should be added specific knowledge of life. The duty of the community to the boy and girl has been pointed out and communities urged to provide recreation facilities for the young as well as the necessity of removing harmful influences. Supervision of dance halls, pool-rooms, movies and other places of public amusement was repeatedly urged.

During the year the venereal disease grant was continued. Each province received the following amount of the grant for the year:—

Nova Scotia.....	\$10,744 33
New Brunswick..	6,710 35
Quebec.....	48,430 14
Ontario.....	60,171 83
Manitoba.....	8,930 75
Saskatchewan.	15,537 16
Alberta.....	12,069 68
British Columbia....	10,759 61

The Canadian Social Hygiene Council worked energetically throughout the year and have reached many thousands with lectures and exhibits. The provincial health authorities are to be congratulated on their activities during the year. There is no falling off in the number of treatments; the attendance at clinics is keeping up and the treatment in institutions is being constantly extended.

It is still very difficult to obtain statistics of value. A questionnaire sent to all physicians throughout the country was answered by approximately only one-fourth of the recipients. Out of 9,000 physicians who received the questionnaire only 2,577 replied. These reported 23,022 cases of venereal disease. Of the many venereal disease specialists in Toronto only two made returns. In Montreal only three or four of the many venereal disease specialists made returns. Well known gynecologists who are removing pus tubes constantly report no cases of gonorrhoea. One of the best known and busiest nerve specialists in Canada reports no syphilis. Well known consultants who see hundreds of patients annually report no venereal disease.

The only conclusion one can draw is that the returns are very inadequate and physicians are apathetic about reporting.

The progress made during the year is in the main satisfactory.

(5) HOUSING, WITH HOSPITALIZATION AND SANITATION

HOUSING

The total amounts loaned to the provinces since the enactment of the Order in Council, P.C. 2997, dated December 3, 1918, as of date March 31, 1924, were:—

Manitoba.....	\$ 1,975,000 00
New Brunswick.....	1,525,000 00
Ontario.....	9,350,000 00
British Columbia.....	1,701,500 00
Quebec.....	7,369,689 62
Nova Scotia.....	1,537,000 00
Prince Edward Island.....	50,000 00
	<hr/>
	\$23,508,189 62

The total number of houses erected, 6,244.

The number of municipalities operating, 179.

A revote of four million dollars was approved by Parliament for fiscal year 1923-24 for the purpose of making loans to provinces to encourage the erection of dwelling houses on the terms and conditions set forth in the Order in Council of December 3, 1918, and amendments made thereto; the appropriation to be

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applied only to the Provincial Governments which had already made commitments to the municipalities, and to cease at the end of the fiscal year 1923-24.

The amount loaned by the Federal Government to the different provinces as of date March 31, 1924, under the housing appropriation of 1923-24 was \$3,174,783.46, and the unexpended amount of revote of 1923-24 as of date March 31, 1924, was \$825,216.54.

Marked activity in housing development is taking place in northern Ontario and increasing demands made for planning with due regard to community needs and not merely for separate unorganized individuals, realizing that the elements of a healthy existence will be lacking unless provision is generously made from the outset for a vigorous associative life.

The division at the request of the Royal Commission on Pensions submitted evidence on the question of housing for ex-service men. *Inter alia* the following commentary emphasized the condition obtaining when such evidence was adduced, i.e.:—

It is conceded by the housing directors of the various provinces that the acuteness of the housing situation has passed to a certain extent, but there is still a visibly expressed desire of the people to participate in home building if facilities are available, which desire, doubtless, has been actuated by the example set by those who have participated under the provisions of the housing schemes.

The vacancies which may have been noted in various cities have doubtless been caused by the desire for better living conditions as expressed in urban and rural localities, in preference to the crowded tenement and badly lighted and ventilated houses which obtain in many of the cities throughout the Dominion to-day.

As to the question of giving assistance to ex-service men in altering houses and, further, as to the expediency for such provision, it is to be noted that in the provinces of British Columbia and Manitoba such assistance has already been rendered under the provisions of the housing schemes, with excellent results.

From the correspondence which has been received by this department from time to time the ex-service men and others living in rural districts would seem to appear to have been at a disadvantage as compared with those living within the precincts of municipalities, towns or cities.

However, since the Federal Government, under the provisions of the General Project for Housing, provided that monies should be loaned to the Provincial Governments for housing purposes, the Provincial Governments to loan the said monies to housing societies, companies, or individual owners of lots, the onus would seem to rest entirely with the Provincial Governments as to the disposition or uses of the money made for housing in the particular provinces, subject only to the four conditions imposed by the Federal Government.

It is to be noted that the present cost of building houses for men who cannot pay more than \$25 a month is too great to permit of an adequate rent being obtained.

HOSPITALIZATION

The division has been consulted by hospital trustees, superintendents and others interested in community hospital work concerning principles, practice and planning, exhibiting a keen interest and desire for information on this subject. It is evident that there is an outstanding demand for such information and judging by the correspondence received the appreciation is manifold.

The hospitalization, incidental to the federal quarantine services, which has been considerably remodelled, is proving its efficacy. The hospitals at Rockhead, Halifax, N.S., and Savard Park, Que., which have been remodelled to conform with present day principles and practice it is anticipated will be the means of largely eliminating cross infection, the *bête noire* of physicians in the past.

Infectious diseases from the viewpoint of efficient planning in hospitalization are receiving very close attention by hospital trustees, consultants and the architectural profession throughout Canada. The division through intensive study of the subject has advised thereon, inculcating the latest principles in planning accepted by the medical profession.

Buildings of the new lazaretto, including leper huts, hospital, caretaker's residence and stores, at Bentinck Island, B.C., which takes the place of the former lazaretto at D'Arcy Island, B.C., have been completed, the medical officer reporting that both patients and personnel have become established in the new quarters.

The residences of the medical officers at the boarding of vessels' station at Father Point, Que., have been remodelled to meet the requirements of the service; the work being executed by the workmen attached to Grosse Isle Quarantine Station, Que.

SANITATION

The division was consulted by the Canadian National Parks Branch concerning the sanitation of residences at Jasper park.

The publications covering sewage disposal and water supplies have been eagerly sought throughout the Dominion, so much so that second editions have been issued.

From time to time the division has furnished technical and educational publications with material covering "Duties of Municipalities Concerning Water and Drainage Facilities," rural water supplies and sewage treatment and disposal.

The Biological Board of Canada consulted the division upon raw water filtration installations for lobster canning factories, and a complete scheme including raw water sedimentation, filter and storage tanks was prepared. This installation would be the means of considerably, if not entirely, eliminating the bacterial content of the water used in such industry.

Opportunity has been taken to acquire information and data upon refuse disposal and treatment of industrial wastes, both of which subjects have already been valuable for disseminating in various parts of the Dominion.

The Provincial Councils of Architectural Associations of the Dominion have sought advice upon the desirability of the preparation of building by-laws applicable to the whole of the provinces. It would appear that, generally, the city building by-laws are not applicable in rural districts and that building is practically carried on without any attempt to follow a code, thereby endangering the health of the people. The associations stated that in Great Britain the Ministry of Health was responsible for the preparation of a building code governing the building operations throughout the British Isles, and furthered their statement with a request that a similar code may be prepared by the Dominion authorities. It is appreciated that there are many difficulties in the way of consummation for such a proposition, which in the meantime is being considered by the Dominion Council of Health.

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HOUSING—STATEMENT SHOWING USE OF FEDERAL LOAN IN THE PROVINCES
(Compiled from Official Reports as of date March 31, 1924)

Province	Amount payable on basis of 1911 census on \$25,000,000 basis	Additional amount payable on basis of \$31,250,000, including revote of \$9,550,080, 1922-23	Amount actually borrowed from Federal Government	Amount advanced by Province	Number of houses built	Number of municipalities
	\$	\$	\$	\$		
Manitoba.....	1,580,534 79	395,133 69	1,975,000 00	1,097,841 09	347	17
New Brunswick..	1,220,710 53	305,177 63	1,525,000 00	*	390	15
Ontario.....	8,753,291 93	2,188,322 98	9,350,000 00	8,653,655 99	2,459	77
British Columbia.....	1,361,521 59	340,380 40	1,701,500 00	1,692,300 00	552	30
Quebec.....	6,949,255 01	1,737,313 75	7,369,689 62	7,369,689 62	2,099	28
Nova Scotia.....	1,707,931 14	426,982 79	1,537,000 00	1,537,460 00	392	11
Saskatchewan....	1,708,257 23	427,064 31				
Prince Edward Island..	325,144 45	81,286 11	50,000 00	15,000 00	5	1
Alberta..	1,299,714 03	324,928 51				
N.W.T.....	64,110 99	16,027 75				
Yukon.....	29,528 31	7,382 08				
Total	25,000,000 00	6,250,000 00	23,508,189 62		6,244	179

* Figures not available from Provincial Government.

(6) OPIUM AND NARCOTIC DRUGS

TABLE 1—Number of various licenses issued under the Opium and Narcotic Drug Act, during the year ended March 31, 1924

Import licenses.....	191
Export licenses.....	51
Wholesale druggists, licenses.....	107
Retail druggists, licenses to manufacture.....	57

TABLE 2—Table showing amount of narcotics imported into Canada under the licensing system, which became effective in the latter part of the year 1919—during the fiscal years ended March 31, 1919-1924, inclusive.

	Cocaine ozs.	*Morphine ozs.	Crude Opium pounds
1919.....	12,333	30,087	34,262
1920.....	6,968	28,198	13,626
1921.....	3,310	12,124	2,953
1922.....	2,952	8,774	1,700
1923.....	3,330	10,998	1,373
1924.....	1,561	7,092	845

*Morphine includes Diacetylmorphine (Heroin).

In addition to the amount of narcotics imported during the twelve months ended March 31, 1924, the following quantities of narcotics were disposed of by the Department of Health and the Department of Customs and Excise, to the trade:—

Cocaine.....	707 ozs.
Morphine, including Diacetylmorphine.....	2,661 ozs.
Crude Opium.....	211 pounds

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TABLE 3—Summary of Narcotics Exported from Canada during the fiscal year ended March 31, 1924.

Drug	Destination	Quantity
Cocaine	Newfoundland.....	1,205 grains
"	Brazil	300 "
"	British West Indies	2,622 "
Morphine	Newfoundland	7,700 "
"	Brazil	2,779 "
"	British West Indies	2,185 "
Codeine	Newfoundland..	629 "
"	Brazil	5,700 "
"	British West Indies	63 "
Heroin	Newfoundland	1,727 "
"	Brazil.....	5,000 "
Powdered opium.....	Newfoundland	10,388 "
Tr. opii	Newfoundland	4 pounds
"	British West Indies	5 "

In connection with the export of narcotics from Canada, it may be explained that most of these drugs are included in a mixture with other ingredients in tablet or pill form, etc., or in the form of tinctures, and are generally included with a general order for drugs of various kinds. The export of narcotics is controlled under license.

TABLE 4—Showing the number of prosecutions handled by the Royal Canadian Mounted Police on behalf of the Department of Health, during the fiscal year ended March 31, 1924.

Province	Doctors	Druggists	Veterinary Surgeons	Illicit Dealers other than Chinamen	Chinamen
British Columbia (not including Vancouver).	1	1		5	92
Vancouver.....				6	25
Alberta.....	3		1	3	14
Saskatchewan.....	2	2	1	7	6
Manitoba				1	1
Ontario not including Toronto ..	4	2		7	7
Toronto				9	4
Quebec not including Montreal ..	1	2		5	6
Montreal	4	2		32	40
New Brunswick				4	3
Nova Scotia.....					
Prince Edward Island					
Totals.....	15	9	2	79	198
Total					303

The above figures represent only federal prosecutions or those handled by the Royal Canadian Mounted Police, on behalf of the Department of Health, and do not include prosecutions handled by the municipal or provincial police.

Table 5 shows number of convictions for offences against the Opium and Narcotic Drug Act, for the judicial year ended September 30, 1923, furnished by the Dominion Bureau of Statistics.

TABLE 5—OFFENCES AGAINST THE OPIUM AND NARCOTIC DRUG ACT FOR THE YEAR ENDED SEPTEMBER 30, 1923.

Province	Total convictions	Sentence			Place of Birth of Person Convicted.																					
		Option of a fine	Committed without option	Deferred, etc.	Ireland	England	Scotland	Canada	United States	China	Holland	France	Greece	Assyria	Italy	Germany	Not given	Roumania	Poland	Russia	Scandinavia	India	Japan	Austria		
Prince Edward Island	6	6																								
New Brunswick	3	3																								
Nova Scotia	488	175	295	18	6	1	343	15	89	3	1	2	1	1	9						6					
Quebec	207	140	61	6	6	3	99	12	61			1		1	9					5						
Ontario	21	11	9	1	1		14	4						1												
Manitoba	40	25	15			1	10	4	22												1					
Saskatchewan	22	19	3		2		1	1	13																	
Alberta	315	167	139	9	7	4	38	16	232			1	1		2	2	5	1	1							
British Columbia	1,102	546	522	34	9	22	12	505	52	420	1	4	2	3	20	2	31	1	2	6	8		1	1		

TABLE 5—OFFENCES AGAINST THE OPIUM AND NARCOTIC DRUG ACT FOR THE YEAR ENDED SEPTEMBER 30TH, 1923

Province	Nature of Offence										
	Breach of Opium and Drug Act	In Possession of			Smuggling Opium	Selling Narcotic drugs	Giving and distributing narcotic drugs	Keeping Opium den	Pre-quanting Opium dens	Importation of drugs	Opium apparatus
		Opium	Cocaine	Morphine								Drugs not specified
Prince Edward Island	3										
Nova Scotia	12			401	5	1					
New Brunswick	1			151	11	11			52		
Quebec	1	3	10		11	13			7	2	
Ontario	6	12			2						
Manitoba	11	3	4		2					1	
Saskatchewan	7	2	1	3	3	1					2
Alberta	38	51	51	9	31	14			76	3	2
British Columbia											
Totals for Canada	78	74	66	514	68	49	14	8	135	5	7

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TABLE 6—Showing the amount of narcotic drugs and opium smoking paraphernalia seized by the Police and Customs authorities during the calendar year 1923

<i>Opium—</i>	
Crude opium.....	93 lbs. 11 ozs. 71 grs.
Tins of opium.....	579
Opium seconds (Yenshee).....	13 lbs.
Jars of opium (Small).....	295
•Decks of opium.....	453
<i>Morphine.....</i>	
.....	232 ozs. 19 grs.
“Decks” of morphine.....	86
Tablets of morphine (½ grs. ¼ grs.).....	413
Ampoules of morphine.....	1,728
<i>Cocaine.....</i>	
.....	424 ozs. 333 grs.
“Decks” of cocaine.....	754
Ampoules.....	576
<i>Heroin (Diacetylmorphine).....</i>	
.....	107 grs.
“Decks” of heroin.....	11
Tablets of heroin.....	145 grs.
Ampoules of heroin.....	144 grs.
<i>Drugs (Miscellaneous) including morphine, heroin and cocaine—</i>	
60 bottles containing.....	292 ozs. 258 grs.
“Decks” of “drugs”.....	1,714
Tablets of “drugs”.....	154
<i>Cannabis Indica (Indian hemp).....</i>	46 ozs.

•“Deck” is a small package containing 3 to 5 grains.

<i>Paraphernalia—</i>	
Opium lamps.....	172
Opium smoking pipes.....	161
Opium scales.....	44
Pipe stems.....	111
Pipe connections (brass).....	99
Ferrules (ivory).....	198
Pipe heads.....	54

TABLE 7—Showing number of aliens convicted of offences under the Act, deported from Canada as from June 28, 1922, to March 31, 1924

Chinese.....	107
United States citizens.....	44
French.....	2
German.....	2
Greek.....	2
Italian.....	2
Irish.....	1
Philippino.....	1
Total.....	161

Some time ago the department sent out a questionnaire to all registered practising physicians in Canada, numbering 8,300, to ascertain the number of persons requiring narcotics under the care of a doctor. Replies were received from 4,019 physicians, or 48.42 per cent. A summary of the replies received, as shown in the following table, may be of interest.

TABLE 8

Province	Medical Cases	
	Male	Female
Ontario.....	163	140
Quebec.....	74	126
Nova Scotia.....	10	20
New Brunswick.....	10	18
Manitoba.....	28	20
Saskatchewan.....	27	25
Alberta.....	24	14
British Columbia.....	10	19
Prince Edward Island.....	Nil	Nil
Totals	395	382
Grand Total		777

In connection with these figures it is of interest to note the results obtained by the authorities in the city of New York in connection with a somewhat similar questionnaire sent out to 14,715 physicians in the state of New York. Replies were received from 7,559 physicians, or a percentage of 51.37. These 7,559 physicians who replied had under their care or treatment, 775 persons who required narcotics.

The majority of the cases included in the returns furnished the department can be properly classified as medical cases, such as chronic neuritis, chronic neuralgia, chronic rheumatism, cancer, tumor, etc. A large number of them, however, were simply cases of straight drug addiction with no apparent organic trouble or, in other words, victims of the habit, relying on the physician to obtain their usual supply of their favourite drug.

At the time the questionnaire was sent out to members of the medical profession, information was collected from every reliable source—medical officers of health, chiefs of police, crown attorneys, magistrates and others who might be in a position to furnish information as to the number of drug habitues in their community. As a result of the information received, an approximate estimate of the number of drug addicts, other than those under medical care, was estimated to be as follows:—

TABLE 9

British Columbia.....	2,250 drug addicts
Alberta.....	370 "
Saskatchewan.....	270 "
Manitoba.....	500 "
Ontario.....	1,800 "
Quebec.....	3,800 "
Nova Scotia.....	500 "
New Brunswick.....	270 "
Prince Edward Island.....	Nil
Total.....	9,500 drug addicts

These figures, of course, are only approximate as it must be realized that it is practically impossible to obtain accurate figures as to the exact number of drug users in Canada, when it is borne in mind that the vast majority of these people obtain their supplies through the medium of the street trafficker or peddler.

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At the meeting of the Dominion Council of Health held in November, 1923, arrangements were made for this department to draw up a model law providing for the treatment, compulsory or voluntary, of all drug habitues and for the provision of suitable institutions at which to treat such cases. At this date, Alberta and Nova Scotia have passed such legislation and now have facilities for dealing with cases of drug addiction. The other provinces have agreed in principle to the provisions of the model law and also to take the necessary steps to submit the bill to their respective legislatures at the earliest opportunity.

During the year, the department has been in constant communication with the Secretary General of the League of Nations respecting narcotic matters, furnishing the League with much detailed information with regard to seizures of narcotic shipments, so that they might be traced to their source and proper action taken by the Governments concerned.

During the past three or four years, the Opium Committee of the League of Nations has been gathering information from all countries signatory to the International Opium Convention or members of the League of Nations as to the amount of opium and cocaine, etc., produced annually and the requirements of such drugs for legitimate medicinal or scientific purposes throughout the world, with a view to devising some practical way of limiting the production of opium and the coca leaf to meet the world's requirements for legitimate medicinal use. Sufficient information has been gathered by the League to determine approximately the amount of narcotics required for legitimate use and a conference has been called to meet at Geneva in November, 1924, to deal with this problem.

On the whole, conditions have improved during the past year due to closer co-operation among all interested authorities in Canada, more drastic laws, better enforcement and, to a large extent, through the co-operation of this department with the authorities of the United States and Great Britain in the way of exchanging information and photographs and finger prints of internationally known drug traffickers.

(7) PROPRIETARY OR PATENT MEDICINES

During the fiscal year ended March 31, 1924, 660 new medicines were registered under the Proprietary or Patent Medicine Act, and a total number of 5,528 licensed.

As it is now a general practice to require manufacturers to submit for inspection before placing their products on the market a sample of all labels, wrappers and literature used in connection therewith, the labels, cartons, wrappers and advertisements of fifty-nine firms were examined, and thirty-two of these were found satisfactory. The others were instructed to make the necessary modifications to meet requirements.

In the enforcement of this Act fifty-eight seizures were made, fifty-five of which were not maintained, the goods being released on assurance given by the manufacturer that, in future, requirements would be strictly conformed to. The medicines involved in the other three were confiscated and destroyed.

The registration numbers assigned forty preparations comprised of medicated wines and other alcoholic remedies suspected of being available for beverage purposes were cancelled, thus further reducing the number of such products licensed. The remaining ones will be further investigated.

A number of medicines which were examined at the departmental laboratory at the request of this branch were found to violate the terms of registration and in each case such penalizing action was taken as the circumstances warranted.

The Advisory Board approved the medication of sixty-five alcoholic preparations and rejected forty as insufficiently medicated. Other matters dealt with by this board were the establishment of rulings in the matter of drug combinations and the fixing of quantities for certain potent drugs.

An Order in Council was passed extending the time for the sale or disposal of all proprietary or patent medicines for internal use on the market bearing a registration number granted under the Act of 1908 and all external proprietary or patent medicines on the market which bear an external medicine stamp marked "Prior to Proprietary or Patent Medicine Act 1919," until the first day of January, 1925.

(8) CHILD WELFARE

The general work of the division has enlarged during the year.

CO-OPERATION WITH OTHER DEPARTMENTS AND DIVISIONS

Some progress has been made in the matters noted:—

Department of Immigration.—(a) Women's Division: Conference and correspondence with the supervisor in regard to the welfare, comfort and safety of women and children; equipment and furnishing of nursery and waiting-rooms at the ports; deportations and other matters. In co-operation with the supervisor, special attention has been given to young women who have recently immigrated to enter home service or to be married and make their homes in Canada.

(b) Juvenile Immigration Division: Conference with minister, the deputy minister and the supervisor.

Department of the Interior.—Northwest Territories and the Yukon: Conferences have taken place with persons who formerly lived in this part of Canada, *re* general child welfare and maternal welfare there.

Department of Agriculture.—Dairy Branch: Numerous conferences *re* milk and publications on this subject.

Health of Animals Branch: Conferences arising out of requests made for information *re* bovine tuberculosis.

Department of Indian Affairs.—Conferences *re* Field Matrons, education of Indian Children, "The Little Blue Books" and other publications.

Department of Soldiers' Civil Re-establishment.—Conferences *re* diet in hospitals and other matters.

The Soldiers Settlement Board, Home Branch.—Conference *re* Outpost Homes and also *re* publications especially "The Supplement to The Canadian Mother's Book."

The Department of Trade and Commerce.—(a) Bureau of Statistics: Conferences and correspondence *re* Vital Statistics including births, infant mortality, maternal mortality and comparable statistics from other countries.

(b) Canadian Government Motion Picture Bureau: Correspondence *re* films, motion pictures, photographs and other matters.

Department of Mines.—Conferences, by request, with officials *re* matters specially affecting the health of women.

Department of Justice.—A number of conferences have taken place with the Inspector of Penitentiaries about boys who are presently confined in penitentiaries.

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CO-OPERATION WITH PROVINCIAL AUTHORITIES

By special invitation, visits have been made during the year to the following provinces: New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, British Columbia.

Special conferences and correspondence have taken place *re* the following: Provincial organization for child welfare, maternal welfare and public health nursing. Minimum wage. Children needing special care on account of not being in their own homes, or because of mental or physical disability and defect. Children of unmarried parents. Hospitals. Mothers' allowances.

CO-OPERATION WITH VOLUNTARY SOCIETIES

Many opportunities have occurred throughout the year for co-operation with societies which are provincially organized, and with others which have a Dominion-wide organization. Among these may be mentioned the Canadian Council of Child Welfare, the Canadian Association of Child Protection Officers, the Women's Institutes, Dominion and provincial, the Homemakers' Clubs, the Women's Section of the Grain Growers' Association, the United Farm Women, the Victorian Order of Nurses, the National Council of Women, the Imperial Order of the Daughters of the Empire, the Canadian Red Cross, the Association of Maternal Assistance, the Association of the Goutte de Lait, Fédération Nationale Saint-Jean-Baptiste and the Fédération des Femmes Canadiennes-Françaises.

PUBLICATIONS (CHILD WELFARE)

The demand for publications has increased during the year, but every effort has been made to conserve the supply by sending less than the number requested and by making inquiries before sending, in order to make sure that distribution would be careful and satisfactory. In most instances, publications are sent out singly and on personal request only.

New Publications.—No new publications have been published during the year but four new series have been outlined and a good deal of material, which has been gathered for some years past, has been reread, revised and arranged in order under the above-mentioned outlines.

The Little Blue Books.—The New and Revised Edition of "The Canadian Mother's Book" was published in English in May, 1923, and in French in November, 1923. The New and Revised English Editions of the other "Little Blue Books"—publications 3-16—appeared at varying intervals during the year, the last being published on February 5, 1924. The French editions are in preparation.

Supplement to the Canadian Mother's Book.—The "Supplement to the Canadian Mother's Book," which is for distribution by doctors and nurses only and is intended for use in Outpost Homes, has apparently been found useful and satisfactory for the purpose for which it was intended. The proof edition of 1,000 copies was issued September 3, 1923, and was sent to a number of doctors and nurses, also to some others who had special knowledge of Outpost Homes. A good many suggestions and improvements were thus received, which were embodied in the revised edition published February 11, 1924.

The Handbook of Child Welfare Work in Canada.—The "Handbook of Child Welfare Work in Canada" is now out of print. The demand exceeded the supply early in the present year.

Age—Height—Weight.—These statistics have been completed and tabulated. They were published during the year by the Department of Health of

Toronto, in co-operation with the Dominion Bureau of Statistics and with this division. The same statistics have also appeared in the New Edition of "The Little Blue Books" and it is expected they will be of practical use.

OUTPOST HOMES

More interest is being taken in this subject, and we have had more letters from these homes. Much remains to be done.

CHILDREN NEEDING SPECIAL CARE

A good deal of time has been given to this subject, chiefly in conference with parents and teachers. Except in one or two centres, the work of organization proceeds slowly and the needs of these children are great.

HOME SERVICE

Conferences and correspondence with the Overseas Settlement Committee and others have advanced this important matter a little.

Steps have been taken by the Department of Health in one of our largest cities to train and register women who are willing to take up this work in co-operation with the other work of the department.

SCHOOL JOURNEYS

Conferences on this subject have been held, and it seems probable that before long this plan may be tried in some simple way.

CHILD INSURANCE

Anxiety was expressed by certain persons in regard to the above subject, and reliable information seemed to be needed. The result of enquiries into two cases cited and of conferences and correspondence with the Dominion and the Provincial Inspector of Insurance, respectively, and the heads or medical directors of three insurance companies showed that there were no grounds for such anxiety.

INFANT MORTALITY AND MATERNAL MORTALITY

This is the best index we have, not only to child welfare, but to general welfare and civilization. The publication, for the first time, of National Canadian Statistics of Infant and Maternal Mortality was made in the "Handbook of Child Welfare Work in Canada" on March 27, 1923, as for the year 1921. Some attention has thus been aroused and frequent references have been made to these figures during the year. The figures for the following year, 1922, are now available and show little or no improvement. They are as follows:—

Total number of infants dying under one year old.....	25,553
Total number of mothers dying in child-birth.....	1,218
Number of infant deaths per 1,000 births.....	101
Number of mothers' deaths per 1,000 births.....	5

In other words, we lose over 73 lives of mothers and children every day, and over 514 every week.*

Infant mortality in Canada is more than twice as high as in New Zealand. Maternal mortality in Canada is nearly twice as high as in England and Wales.

* Statistics obtained from the Dominion Bureau of Statistics on request. Quebec figures are reported from provincial records only.

(9) FOOD AND DRUGS DIVISION

During the year ended March 31, 1924, the activities of this division have been carried on with the purpose of maintaining the quality of food and drugs as sold to the people of Canada. Samples of many articles were procured and analyzed. In all cases where it was found that inferior goods were on the market, effort was made to remove the cause of the difficulty by correction at the source. Wilful and persistent offenders were summoned to court and the final results have proven that this procedure was justified.

Control of importations of food is one of our best protections, because it is much better policy to stop defective goods at the ports of entry than to try to control the sale after they have passed through the regular channels of trade.

In addition to the general routine work in connection with suspected articles, several systematic collections were made, including the following foods and drugs: honey, butter, caramels, peanut butter, salt, coffee, vinegar, lard, chloride of lime, disinfectants, hydrogen peroxide, rhubarb, senna leaves, epsom salts, fluid extract of cascara, fluid extract of senna, liquor arsenicalis, mercury ointment, zinc ointment, paregoric, tincture of iodine and tincture of gentian. The general condition of the supply of these articles is regarded as satisfactory, although retailers do not always take the necessary trouble to store unstable articles so as to prevent decomposition and there is apparent lack of care in manufacture of such preparations as liquor arsenicalis, and tincture of iodine.

In the laboratories operating at Ottawa, Halifax, Montreal, Winnipeg, and Vancouver analyses were made of 6,274 samples, as detailed in the following tabulated summary:—

SUMMARY OF SAMPLES OF FOOD AND DRUGS ANALYZED

OTTAWA

Aledine.....	1	Disinfectants.....	27
Ammonia, aromatic spirit ..	4	Dried fruits.....	20
Antiseptic.....	1	Drugs (misc.).....	65
Arex, compound.....	1	Drugs (narcotic).....	131
Asperin... ..	4	Dubbing.....	2
Baking powder.....	22	Duko.....	1
Beans.....	23	Dyes.....	5
Beverages.....	6	Eggs.....	2
Bleaching powder.....	12	Egg albumen.....	17
Bologna sausage.....	2	Egg flakes.....	1
Boracic acid.....	1	Egg yoke.....	4
Boracic ointment.....	8	Elixir lact. pepsin.....	1
Borax and honey.....	1	Epsom salts.....	32
Brosmeal.....	1	Essence of peppermint.....	6
Butter.....	109	Evaporated milk.....	1
Camphor, liniment.....	1	Fats.....	2
Camphor, spirits of.....	4	Feeds.....	13
Camphorated oil.....	23	Fertilizers.....	25
Candy.....	10	Figs.....	5
Candy (caramel).....	96	Fish.....	4
Canned apples.....	2	Flavouring extracts.....	8
Canned beef.....	1	Fluids (washing).....	1
Canned herring.....	1	Flour.....	5
Carbon tetrachloride.....	7	Fluid extract cascara.....	21
Chocolates.....	5	Fluid extract senna.....	14
Cherries.....	1	Gasoline.....	4
Cider.....	1	Gelatine (leaf).....	2
Cloves (whole).....	1	Gelatine (powdered).....	28
Cloves (ground).....	2	Gentian.....	6
Cocoa and cocoa products..	21	Ginger.....	2
Coffee.....	2	Ginger wine concentrate.....	4
Coffee.....	58	Grape juice.....	1
Confection powder....	2	Hamburg steak.....	8
Corn.....	2	Honey.....	44
Cream of tartar.....	2	Horseradish.....	1
Cream of wheat.....	1	Hops.....	3
Custard powder.....	4	Hydrogen peroxide.....	103
Dates.....	1	Icing sugar.....	9

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OTTAWA—Concluded

Infant food.....	61	Peppermint extract.....	1
Insecticide powder.....	1	Peppermint, spirits of.....	3
Iodine.....	6	Peppermint, oil of.....	1
Jam.....	66	Pickles.....	1
Lard.....	99	Poison (rat).....	1
Lemonade.....	1	Pork.....	1
Lemon extract.....	2	Pork and beans.....	1
Lemon juice.....	1	Preservatives.....	1
Lime water.....	11	Preservaline.....	1
Lime water tablets.....	1	Prunes.....	1
Liquor arsenicalis.....	51	Rhubarb root.....	9
Luputon.....	1	Salt.....	22
Maple butter.....	2	Sausages.....	34
Maple sugar.....	8	Seidlitz powders.....	5
Maple syrup.....	50	Senna leaves.....	9
Marmalade.....	6	Shortening.....	1
Medicines (cattle).....	1	Soap (Castile).....	3
Medicines, prepared.....	6	Soap (miscellaneous).....	41
Medicines, miscellaneous.....	10	Strawberries.....	12
Milk and malt foods.....	4	Sugar (sucre de table).....	1
Mineral oil.....	3	Sugar (cane).....	2
Mineral water.....	1	Sugar (miscellaneous).....	3
Mustard.....	2	Syrup (corn).....	1
Nitre (spirits of).....	5	Syrup (golden).....	2
Nutmegs.....	8	Syrup (sugar).....	2
Oil (cylinder).....	2	Syrup (table).....	13
Oil (linseed).....	1	Tablets (miscellaneous).....	1
Oil (lubricating).....	19	Tea.....	5
Oil, castor.....	5	Tomato paste.....	4
Oil, Rangoon.....	1	Turpentine.....	2
Oil, sweet.....	7	Vanilla extract.....	4
Ointment.....	1	Varnishes.....	4
Orange peel.....	1	Vinegar.....	56
Orange preparation.....	5	Walnuts.....	2
Paint.....	24	Water.....	8
Paregoric.....	1	Wine.....	6
Peanuts.....	1	Wine (tonic).....	37
Peanut butter.....	18	Wine (medicated).....	16
Pepper.....	27		
Pepper shells.....	4	Total.....	1,913

Samples of soap, lubricating oil, paints and varnish were examined for the Department of National Defence. Analyses of fertilizer were made for the Department of Agriculture.

HALIFAX

Samples Analyzed

Ammonia solution.....	17
Ammonia, aromatic spirits of.....	18
Allspice.....	6
Baking powder.....	20
Cassia and cinnamon.....	5
Camphor, spirits of.....	1
Camphorated oil.....	1
Chlorinated lime.....	15
Cider.....	1
Cloves.....	6
Coffee.....	13
Confectionery.....	11
Cream of tartar.....	1
Flavouring extract, lemon.....	28
" peppermint.....	16
" vanilla.....	28
" wintergreen.....	9
Fruit, dried and packaged.....	32
Gelatine.....	10
Ginger.....	9
Gum benzoïn.....	2
Honey.....	2
Hydrogen peroxide.....	11
Iodine, tincture.....	33
Jams.....	8
Lard, shortening.....	19
Liquor arsenicalis.....	20
Lime water.....	25
Marmalade.....	6

Pepper.....	20
Salad oil.....	2
Sausages.....	2
Sugar, icing.....	10
Sugar, maple.....	12
Sweet spirits nitre.....	12
Tea.....	5
Vinegar.....	16
Water, bottled.....	9

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Samples of Importations Examined

Beans.....	8
Cassia and cinnamon, whole.....	11
Cassia buds.....	1
Chinese medicine.....	2
Cloves, whole.....	9
Cocoa beans.....	1
Cocoa powder.....	2
Fruit, dried.....	17
Ginger, whole.....	12
Lobsters, canned.....	3
Mace, whole.....	4
Molasses.....	1
Mustard seed.....	5
Mustard bran.....	1
Mustard, ground.....	1
Mustard compound.....	1
Nuts, Brazil, walnuts, almonds.....	20

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HALIFAX—Continued

Samples of Importations Examined—Continued

Nutmegs.....	34
Paprika.....	1
Peas.....	1
Pepper.....	10
Pimento.....	1
Poland water.....	1
Preservatives.....	4
Salmon, canned.....	1
Seasoning.....	2
Sugar.....	4
Turpentine.....	1

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Special Samples—for other Departments, etc.

Beer or wash.....	1
Butter.....	2
Cream.....	3
Creosoted timber and oil.....	2
Fertilizers.....	2
Milk.....	1
Opium (suspected).....	7
Water.....	4

22

Total samples examined..... 641

MONTREAL

Allspice.....	1
Bacon.....	2
Baking powder.....	24
Blackening powder.....	26
Boric acid ointment.....	14
Butter.....	103
Camphor.....	3
Camphor, spirits of.....	23
Camphorated oil.....	23
Caramels.....	49
Carbolic acid ointment.....	12
Castor oil.....	12
Cherry.....	2
Cloves.....	11
Cocoanut oil.....	1
Coffee.....	39
Coffee substitutes.....	4
Corn (canned).....	11
Corned beef.....	1
Cream.....	4
Cream sugar.....	1
Cream of tartar.....	10
Cream of tartar substitute.....	1
Dried fruit.....	7
Formalin.....	3
Fowler's solution.....	9
Gauvin's aniseed syrup.....	1
Gin.....	1
Ginger.....	11
Ginger, essence of.....	1
Glycerin.....	13
Glycerin of boric acid.....	8
Ham.....	2
Headache wafers and tablets.....	11
Honey.....	13
Hydrogen peroxide.....	30
Large sugar.....	8
Iodoform ointment.....	9
Jam.....	8
Lard.....	19
Lemon extract.....	7
Lime water.....	11
Lime water tablets.....	6
Maple essence.....	2
Maple sugar.....	19
Maple syrup.....	18
Mercuric iodide ointment.....	3
Mercuric oxide (yellow) ointment.....	6
Mercury ointment (blue ointment).....	7
Milk.....	8
Minted water.....	36
Mint.....	16
Mustard.....	7
Orange.....	1
Orange crush.....	1
Orange.....	6
Oil—Sard.....	3

Oil—Sweet (oil of almonds).....	1
Paregoric.....	8
Peas, canned (imported).....	9
Pepper—White.....	19
Pepper—Black.....	6
Peppermint creams.....	1
Peppermint extract.....	1
Pills.....	1
Sausages.....	14
Seidlitz powders.....	27
Sulphur ointment.....	11
Sweet spirits of nitre.....	6
Syrup ("Home Brand").....	1
Table sugar.....	3
Table syrup.....	3
Tincture of benzoin compound.....	1
Tincture of gentian compound.....	15
Tincture of ginger.....	10
Tincture of iodine.....	21
Tincture of iodine, strong.....	15
Tincture of orange.....	4
Tonic wine.....	7
Vanilla extract.....	9
Vichy lemonade.....	5
Vichy water.....	1
Vinegar—	6
Cider.....	17
Malt.....	13
White wine.....	6
Yeast-Co.....	1
Zinc ointment.....	21

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Samples from Importations

Almonds.....	1
Apricots (dried).....	8
Beans.....	1
Cane sugar.....	1
Clove stems.....	1
Fresco flavor.....	1
Herring.....	1
Maple essence.....	1
Molasses.....	1
Narcotic (suspected).....	1
Olives (black).....	10
Olive oil.....	3
Peaches (dried).....	8
Pears (dried).....	6
Preservaline.....	1
Prunes.....	1
Raisins.....	4
Snails.....	1
Tomato paste.....	5
Walnuts.....	3

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MONTREAL—Concluded

Samples from importations—Continued

<i>Samples submitted by R.C.M.P.</i>	
Medicine.....	1
Narcotics.....	118
Rami-Gouttes.....	1
Snuff.....	1
	<hr/>
	121

Samples from the Department of Agriculture

Butter.....	125
Cheese.....	2
Cream.....	3
Fertilizers.....	14
	<hr/>
	144

Special Samples

Alum powder.....	1
Baking powder.....	39
Camphor, spirits of.....	1
Exhibits from excise officers.....	3
Feed.....	1
Narcotic.....	1
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	46

Recapitulation

Departmental inspectors.....	71
Importations.....	59
Royal Canadian Mounted Police.....	121
Department of Agriculture.....	144
Special.....	46
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Total.....	1,321

WINNIPEG

Allspice, ground.....	3	Lime water.....	35
Almond extract.....	1	Lime water tablets.....	1
Aprol (oil of Persica).....	1	Macaroni.....	1
Baking powder.....	13	Maple butter.....	2
Benzoin, cpd. tincture.....	1	Maple syrup.....	28
Biscuits (rusks).....	1	Mace.....	1
Bisto.....	1	Mapleine.....	1
Bleaching powder (chloride of lime).....	18	Marjoram.....	1
Boracic acid ointment.....	2	Molasses.....	1
Camphor spirits.....	6	Nitrous ether spirit.....	6
Camphorated oil.....	8	Nutmeg, ground.....	1
Canned goods.....	3	Olive butter.....	1
Cassia, ground.....	1	Olive oil.....	15
Cayenne (and paprika).....	3	Oranges.....	25
Cloves, ground.....	5	Packages foods.....	23
Cochineal.....	2	Paraffin in confectionery.....	23
Coffee and coffee substitutes.....	89	Peanut butter.....	5
Corn starch.....	1	Pepper, black.....	16
Cream.....	1	Pepper, white.....	14
Cream tartar.....	1	Peppermint flavour.....	1
Custard powders.....	2	Pickles.....	1
Dried fruits.....	3	Raspberry flavouring.....	1
Egg substitute.....	1	Salted peanuts.....	1
Flour.....	1	Samples—re labelling.....	7
Gelatine.....	3	Strawberry flavouring.....	1
Ginger, ground.....	3	Sweet oil.....	1
Ginger, tincture.....	1	Syrups, table.....	3
Glycerine.....	1	Tea.....	4
Honey.....	5	Toilet preparations.....	6
Hydrogen peroxide.....	29	Turmeric.....	1
Herrings in tomato sauce.....	3	Vanilla flavouring.....	5
Iodine tincture.....	15	Vinegar.....	75
Lard.....	22	Wine.....	1
Lemon flavouring.....	5		
		Total.....	633

Occasional Samples (from Federal Departments)

Department of Agriculture, Dairy Division, butter.....	6
“ “ Fruit Division, dried fruits.....	87
“ “ Seed Branch, feeds.....	17
Department of Customs and Excise, Customs, beans.....	34
“ “ “ celery.....	45
“ “ “ cloves.....	2
“ “ “ cocoa.....	22
“ “ “ cardamom.....	2
“ “ “ cardamom.....	3
“ “ “ olive oil.....	35
“ “ “ sugar.....	1
“ “ “ sugar.....	2
“ “ Excise, liquors.....	44
“ “ “ bottles, capacity of.....	40
Royal Canadian Mounted Police, narcotics.....	2
“ “ “ excise liquors.....	2
“ “ “ Indian Affairs, liquors.....	2
Royal Canadian Air Force, well water.....	1

From Other Sources

Baking powder.....	1
Cream tartar.....	1
Epsom salts.....	1
Honey.....	1
Liquors, for alcohol.....	7
Marmalade.....	2
Vanilla.....	1
Vinegar.....	1
Egg albumen.....	1
Occasional samples total.....	<u>360</u>
Grand total.....	<u>993</u>

VANCOUVER

Allspice.....	2	Sugar.....	49
Albumen, egg.....	2	Thyme.....	1
Almonds.....	1	Tomato paste.....	4
Apples, evaporated.....	6	Tomato puree.....	1
Beans.....	47	Vanilla beans.....	1
Brazil nuts.....	3	Vinegar, concentrated.....	2
Cassia.....	3	Walnut meats.....	35
Celery seed.....	1	Walnuts, whole.....	4
Chutney, Indian.....	1		
Cloves.....	4		<u>889</u>
Cocoa.....	1	Total import samples.....	<u>1,005</u>
Colour, liquid egg.....	1		
Coriander seed.....	3		
Cream thickener.....	1		
Dates.....	2		
Eggs, dried.....	1		
Eggs, whole.....	3		
Essences, flavouring.....	1		
Extracts, flavouring.....	1		
Figs.....	3		
Flour, sausage.....	2		
Ginger.....	5		
Grape fruit.....	1		
Grape juice.....	3		
Herrings, canned.....	1		
Mace.....	9		
Macaroni.....	7		
Malt products, liquid.....	1		
Milk, powdered, skimmed.....	1		
Nutmegs, whole.....	11		
Oil, olive.....	22		
Oil, cottonseed.....	1		
Oil table.....	1		
Oil, Wesson.....	1		
Oranges.....	715		
Olives, black.....	3		
Paprika.....	1		
Pecan nuts.....	1		
Peanuts in shell.....	1		
Pepper.....	16		
Pineapple, canned.....	5		
Preservatives.....	5		
Raisins.....	1		
Sage.....	1		
Savory.....	1		
Salmon, canned.....	3		
Spice, mixed.....	1		
Shrimp paste.....	1		

Domestic Samples submitted

Ammonia, household.....	4
Apple juice.....	3
Candy.....	4
Caramels.....	39
Camphorated oil.....	9
Chloride of lime.....	18
Coffee and coffee substitutes.....	4
Cocoa butter prep.....	3
Egg substitute.....	1
Figs.....	4
Fish, smoked.....	1
Ginger wine.....	1
Herrings, canned.....	18
Honey.....	1
Hydrogen peroxide.....	10
Koline.....	1
Lime water.....	30
Lobster, canned.....	2
Macaroni.....	1
Marshmallow candy.....	1
Maple syrup.....	2
Meat and fish products.....	21
Milk, evaporated.....	1
Oil, olive.....	2
Peas, canned.....	2
Port wine.....	1
Sausages.....	32
Shrimp, canned.....	1
Soft drinks.....	8
Sardines in oil.....	1
Tomato paste.....	2
Vinegars.....	5

Total domestic samples..... 233

From Federal Departments

Department of Agriculture, Dairy Division, butter.....	5
" " " Meat and canned foods, evaporated fruits.....	101
" " " Black currant pulp, canned.....	1
" " " Potted meats and fish.....	9
" " " Frozen meats.....	3
" " " Tomato paste.....	2

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(10) PUBLIC WORKS HEALTH ACT

The regulations made under authority of this Act require that every public work within the legislative authority of the Parliament of Canada be periodically inspected by a medical officer of the Department of Health, in order to see that the said regulations are enforced and complied with, having in view the preservation of health and the mitigation of disease among the persons employed thereon. This includes the inspection of the accommodation afforded said employees so as to ensure its sanitary condition, the provision of adequate hospital accommodation and medical attention in time of sickness, disease or accident, and the proper isolation and care of persons suffering from contagious or infectious diseases.

WESTERN CANADA

Dr. A. E. Clendenan, medical inspector for Western Canada, reports as follows:—

“The public work inspected was limited entirely to railway construction. No epidemics occurred on any of the contracts. A medical service was freely provided by the contractors without request, with one exception. In this case it was installed at once when representations were made by your Inspector as to the requirements of the Act.

“All the construction work during the past year was on branch lines of the Canadian Pacific Railway, and in all cases it was feasible and advisable to use established municipal and red cross hospitals by special arrangements with them. Sick employees like them better than temporary hospitals along the grade, and they are much better for surgical cases.

“The following contracts were visited as often as was necessary to keep the medical service up to standard:—

“Canadian Pacific Railway, Cutknife Branch from Cutknife, Sask. to Battle River, Alberta: Chief contractor, W. A. Dutton, Winnipeg, Man.; principal sub-contractors, P. Mannix, Jas. Fitzgerald, A. Young, E. Foley; total employees, 208; Dr. Banting, Cutknife, Sask. in charge; the local Red Cross Hospital was used.

“Canadian Pacific Railway, Leaneoil, B.C.: Contractor, H. H. Boomer, Leaneoil, B.C., with 180 employees; Dr. Ewert in charge; hospital conducted by Golden Hospital Society.

“Canadian Pacific Railway, Milden-Empress Line in Saskatchewan: Force work with 156 employees; F. Jackson, Rosetown, chief contractor, with the following sub-contractors: A. Marks, P. Jackson, Frizzell and Simmons; total employees, 100; Dr. A. A. Drinnan, Outlook, in charge and using the Outlook Municipal Hospital.

“Canadian Pacific Railway, Rosetown, southeasterly: Wm. Dutton, chief contractor; principal sub-contractors, D. Grant, Ward and Sproule, Van Buskirk; total employees, 130; Dr. Johnson, Broek, Sask., in charge, having a private hospital of six beds.

“Canadian Pacific Railway, Wymark—Archives, Sask.: First contract of 35 miles by Stewart & Welsh, Vancouver, B.C., who sublet to J. A. Sandgren, Kimball Bros., and Morrison & Dempster; second contract of 15 miles to D. Grant; total employees, 283; Dr. Knippel, Swift Current, Sask., in charge, using Swift Current Municipal Hospital.

“Canadian Pacific Railway, Neicam, Melfort, Sask: Chief contractors were Stewart & Cameron, 167 Grain Exchange, Winnipeg, Man., assisted by nine sub-contractors; total employees, 243. Doctors in charge were Dr. Thorn, Pleasantdale, and Dr. Baker, Melfort. Hospital used was Melfort Municipal.

" Canadian Pacific Railway (1) Tuffnell, Sask. to 20 miles north of Wadena, Sask., 50 miles in all. Chief contractors were Grant Smith & Co., and McDonald Ltd., Vancouver, B.C. There were eight small sub-contractors; total employees, 180.

" (2) Extension of above line for 45 miles to Tisdale, Sask., also contracted by Grant Smith & Co. and McDonald Limited, with Treadway & Sons, Tisdale, and Jas. Miller, Tisdale, as sub-contractors; total employees, 225. Medical service was furnished by Dr. Rollins of Wadena and Dr. Somers of Foam Lake with hospitals in Wadena and Tisdale."

EASTERN DIVISION

The Inspector for Eastern Canada reports as follows:—

" The chief works going on in the Eastern Division are the construction of the dry dock at Courtenay Bay, N.B., and of the Welland canal.

" *Courtenay Bay.*—Courtenay Bay is situated about three miles from the centre of St. John, N.B.

" The work consists of the building of a dry dock and the dredging of the bay. The average number of men employed is from six hundred to seven hundred. The work is carried out by contracts and sub-contracts and all of the personnel are placed under the provisions of the Workmen's Compensation Act of New Brunswick.

" With the exception of perhaps eight or ten workmen, all the others reside at St. John. The quarters occupied by the few workmen who are living on the construction plant are clean and comfortable. The meals are provided by the Dry Dock Company and the food is of excellent quality. Full provision is made for the medical and surgical care of the employees. There have been very few accidents during the year. Those that occurred were of minor nature.

" *Welland Canal.*—

" From a professional standpoint two matters are of interest: first, the increase in the number of patients requiring medical and surgical attention and, second, the more decided interest taken in this work by the Workmen's Compensation Board.

" The number of patients.—Our records afford the following statistics:—

" (a) The Canal Hospital, April 1, 1923, to March 31, 1924:

" Out-patient clinical examinations and treatments 3,413.

" Visits made to employees sick or injured at their homes 897.

" Patients admitted to the wards of the hospital 122.

" Hospital days 2,449.

" Deaths in hospital 4.

" (b) The Thorold Office:

" Out-patient clinical examinations and treatments 1,948.

" (c) General averages.—Of the number of patients treated the percentage of illness as against surgical (mostly accident) cases is: Medical cases, 39 per cent; surgical cases, 31 per cent.

" The percentage of returned men applying for treatment is 18.5 per cent.

" I am glad to say that the instructions I gave during my last visit, concerning the sanitation of camps, were in the main carried out. At lock No. 2, a building occupied by sub-contractors Aiken and Innes for their employees and which was condemned as totally unfit for human habitation has been abandoned. In addition, Campbell's Hotel at Port Robinson, which was likewise condemned is no longer in use. While there is some room for improvement, the sanitary conditions are in the main satisfactory.

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"In my last report, I pointed out the fact that dredges working in the Port Robinson section were discharging raw sewage into the canal. This would appear to have been a contributory factor to the outbreak of typhoid which occurred at Thorold. This pollution has now ceased.

"While sanitary conditions in the canal area are on the whole satisfactory, there is still room for some improvement in the camps, and it is hoped that the advice which has been tendered by your Inspector in this regard will result in further improvement."

(11) POLLUTION OF BOUNDARY WATERS

By Order in Council of June 19, 1923 (P.C. 1091), approval was given to the "Regulations concerning Water for Drinking and Culinary purposes on Vessels navigating on the Great Lakes and Inland Waters."

The following is a report of the work done towards the enforcement of these regulations during the navigating season of 1923.

The general idea underlying the work done was a reconnaissance of the conditions prevailing relative to the supply of a potable water for drinking and culinary purposes for vessels engaged in navigation on the Great Lakes.

This involved the physical examination of the pumps, piping, tanks, outlets and water purification apparatus, if any, aboard these vessels, as well as a quick reconnaissance of the vessels themselves for possible causes of contamination of the water supply; visits to the docks at the terminal ports of the various fleets of passenger steamships engaged in this traffic; correspondence and interviews with health and navigation officials regarding the certification of water supplies ashore, compliance with regulations for maintenance of water supplies of standard quality, etc.

Considerable co-operative work has been carried on with the representative of the United States Public Health Service, by correspondence, reports of steamship inspections, certification of water supplies, and water analyses reports exchanged.

Throughout the season, steamship companies operating vessels in passenger service on the Great Lakes have been supplied with copies of Water Analyses reports and where it seemed advisable, attention of the management of these organizations was drawn to flagrant violations of the Regulations. Also copies of the Regulations concerning water for Drinking and Culinary purposes on vessels navigating on the Great Lakes and Inland Waters of Canada, were distributed to every known Canadian steamship company operating vessels on the Great Lakes.

A definite result is shown by the improvement in the quality of the drinking and culinary water in use by the following companies:—

(1) Niagara, St. Catharines and Toronto Railway and Navigation Company; the ss. *Dalhousie City* and *Northumberland* have now the record for the cleanest water in the port of Toronto, for the season 1923; whereas formerly they were reported against as careless by the officials of the Department of Health, City Hall, Toronto.

(2) The Canadian Pacific Great Lakes Passenger Steamship Service was improved by alterations to the drinking water tanks on board the ss. *Manitoba*, the capacity of this tankage being changed from about 900 gallons to 5,200 imperial gallons, which is equivalent to 30 gallons per capita. On the occasion of re-examination of this steamship on August 10, the shore superintendent for the Canadian Pacific Railway at Port McNicol, expressed his appreciation of the work being done by health officials to improve the water service on their vessels.

(3) The Dominion Transportation Company and the Owen Sound Transportation Company both have shown appreciation of the work being done.

Bacteriological reports of samples of water taken throughout the season of navigation from the vessels of these organizations are evidence of improvement accomplished by cleaning and chlorinating the ships' water supply systems.

(4) Three deaths from typhoid fever having been reported among the crew of the freighter *Canadian Engineer* of the Canadian Government Merchant Marine, special attention was given to this vessel and the attention of the Master particularly drawn to various possible sources of contamination of the water supply aboard his ship.

Certification of the municipal water supplies at various Great Lakes ports having been obtained from such authorities as the Provincial Board of Health for Ontario ports and the United States Public Health Service for ports on the other shore, note was taken of the facilities available at the docks of ports visited for supply of such water to vessels. It was found that:—

At Montreal, vessels of the Canada Steamships Line obtain water from hydrants at Victoria pier.

At Prescott, drinking water is obtained from the municipal system by the Prescott and Ogdensburg ferry steamships.

At Kingston, water is taken by various passenger vessels.

At Toronto, passenger vessels of the following steamship companies fill their tanks from hydrants at the wharves, viz.:—

(1) Niagara, St. Catharines and Toronto Railway and Navigation Company.

(2) Canada Steamships Lines Limited.

(3) Toronto Ferry Company.

Windsor-Walkerville area has two points where steamships may fill their water tanks, viz., at hydrant at foot of Brock Street and the hydrants at Walker dock.

Sarnia has pipe lines laid on to the docks at Point Edward.

Midland wharf is provided with water pipes that are supplied by the municipal water works.

Of the eighteen Canadian ports, suggested by officials of the Provincial Board of Health of Ontario as probably capable of furnishing water equal to the United States Treasury standard, only seven have facilities at the wharves from which vessels may obtain drinking and culinary water.

As the polluted water of Great Lakes harbours is unfit for use, and vessels are often detained for periods of variable duration at these ports, it is very important that the storage capacity of the tanks for drinking and culinary water should be ample.

That there is a great variation in the quantity of water available for drinking and culinary purposes on Great Lakes vessels is clearly shown. It is also noticeable that although it is a comparatively simple matter to obtain water of the required standard, there are numerous passenger vessels of Canadian register in this area, whose water tanks have a per capita capacity less than the water consumption on vessels of the British Navy or Merchant Marine.

In this regard it is of interest to note, that almost invariably, the bacteriological records of steamships having water tanks of small capacity, such as the *Manitoba*, *Caribou*, *Manitou*, *Midland City*, *Alberta*, *Bon Ami*, *Corona*,

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Cayuga, Rapids King, Rapids Queen, were far from satisfactory. There would appear to be two important points with respect to the water tanks, i.e.:—

- (1) They must be kept clean.
- (2) They should be of ample capacity.

In the cases of the passenger steamships in the above list, not only were the tanks for drinking and culinary water inadequate in size, but also, laboratory tests of samples of water taken at regular intervals from the supply systems aboard these vessels, showed the culinary and drinking water to be badly contaminated by the presence of colon bacilli in excess.

The provision for protection of the water supply, at the waterworks, has been noted at practically every terminal port visited through the season. It was observed that with perhaps three exceptions, the method of disinfection was by means of liquid chlorine.

With regard to the responsibility for supervision of the supplies of water for drinking and culinary purposes, on passenger steamships, engaged in other than ferry service on the Great Lakes system, a general division of the traffic is as follows:—

On the lake Ontario-river St. Lawrence routes the tourist traffic is carried almost entirely by passenger steamships of Canadian register.

On lakes Erie and Michigan the opposite condition holds true. But, on the lakes Huron-Superior service statistics, compiled by officials of the United States, show that sixty-one per cent of the travelling public is carried by passenger steamships owned in Canada.

The taking of water samples and the reports on their subsequent analyses by health officials at Toronto, Windsor, Owen Sound and Fort William, has been a powerful aid in accomplishing such improvements as have been made this season.

During the present season of navigation the appearance of fleets such as those of the Bay Line, Eastern Steamships Company and other owners have increased shipping of Canadian register on the lower lakes by over forty steamships. So also, a Norwegian fleet of some sixteen steamships has added to the problems involved in the whole matter under investigation. To handle these steamships in the Great Lakes, pilots of Canadian nationality are taken aboard at Montreal. These pilots should be instructed as to the regulations concerning drinking and culinary water, restricted areas, etc.

Typhoid fever among passengers and crews of Great Lakes steamships is undoubtedly much greater than is shown by the figures given below which were compiled from data of a fragmentary nature. The limited time spent on the whole question of water supply of the Great Lakes shipping did not admit of a thorough investigation of any particular phase of the matter.

The total number of cases of typhoid fever reported from Great Lakes shipping during the period under review is as follows:—

Steamships of Canadian register—45 cases, 7 deaths.

Steamships of United States register to August 18, 1923.—18 cases, 1 death.

SUMMARY OF SEASON'S WORK, 1923

Vessels boarded by Health Officials	Port	Had vessel separate supply system	Number of analyses of water supply	Remarks
"Keewatin" ..	{ Sault Ste. Marie Fort William	Yes	7	Considerable improvement in quality of water supplied.
"Assiniboia"	{ Port McNicol Port McNicol Sault Ste. Marie Fort William	Yes	11	Considerable improvement in quality of water supplied; two persons developed typhoid in August.
"Manitoba" ..	{ Owen Sound Port McNicol Sault Ste. Marie	Yes, but inadequate	12	Two cases of typhoid developed in August. New tank capacity of 5,200 gallons put aboard this ship.
"Alberta"	{ Port McNicol Sault Ste. Marie	No	2	Water is very bad.
"Athabaska"	Port McNicol	No		
"Hagarty"	Port McNicol	No		
"Grant Morden"	Port McNicol	Yes		
"Mathewston"	Port McNicol	No	1	
"Noronic"	{ Sarnia Sault Ste. Marie	Yes—but also is by passed	17	Water supplied is of variable quality. By passes on water system.
"Hamonic"	{ Sault Ste. Marie Walkerville	Yes	10	Water supplied of fair quality—Ultra Violet apparatus in use.
"Huronie"	Sault Ste. Marie	Tank in hull	8	Water supplied of variable quality; storage tank in hull.
"Thousand Islander"	{ Clatham Detroit	Yes	6	Water supplied of fair quality.
"Rapids King"	{ Wallaceburg Erieau	Yes	3	Water supply troublesome. At one period of season of 1923 there were 26 members of ship's crew laid up with cramps, diarrhoea, etc.
"George R. Gray" ..	Sault Ste. Marie	No	4	Water unfit for use. Laboratory Test (Russel's Double Sugar) showed evidence of presence of typhoid bacillus on August 18.
"Caribou"	Sault Ste. Marie	No	12	Water of doubtful quality, great variation from dangerous to safe.
"Manitou"	{ Owen Sound Sault Ste. Marie	No	15	Water of very doubtful quality, varying from absolutely foul and dangerous to safe. (Cattle are carried as well as passengers.)
"Michipicoten" ..	{ Sault Ste. Marie Owen Sound	No	6	Water aboard ship of varying quality from bad to fair.
"Bon Ami"	Sault Ste. Marie	No	11	Water has been had all season. Laboratory test of August 21 showed evidence of presence of <i>Paratyphoid</i> .
"Henry Pedwell" ..	Owen Sound	No	3	Water bad.
"Chippewa"	Toronto	Combined	2	By passes ordered removed from water system.
"Corona"	Toronto	Combined	3	By passes ordered removed from water system.
"Kingston"	Toronto	Combined	2	By passes ordered removed from water system.
"Cayuga"	Toronto	Yes	6	Water of fair quality.
"Canadian"	Toronto	Combined		Water in tanks filthy at time of inspection.
"Northumberland" ..	Toronto	Yes	7	Decided improvement in water by middle of summer.
"Dalhousie City" ..	Toronto	Yes	8	Water supplied is of fair quality.
"Edmonton"	Port Arthur	Combined	1	Analyses of water on June 3 showed water of good quality.
"Glenmount"	Sault Ste. Marie	Combined		Foul odour from sanitary conveniences.
"Maple Leaf"	Sault Ste. Marie	Combined		
"Collingwood"	Sault Ste. Marie	Combined	1	Water showed presence of Colon Bacilli in 10 c.c. June 10.
"Toronto"	Toronto	Separate	5	Water supplied of fair quality.
"Kingston"	Toronto	Combined	2	Ordered by pass between sanitary and drinking systems taken out to give separate systems.

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SUMMARY OF SEASON'S WORK, 1923—Continued

Vessels boarded by Health Officials	Port	Had vessel separate supply system	Number of analyses of water supply	Remarks
"Macassa"	Toronto	Separate	6	Analyses showed water of fair quality.
"Modjeska"	Toronto	Yes	3	Analyses showed water of fair quality.
"City of Dover"	Midland	No		Very unsatisfactory water supply aboard this SS. for passenger service.
"Midland City"	Midland	Yes	8	Water supplied is of fair quality.
"Glenlivet"	Midland	Combined		
"A. J. McKee"	Midland	Combined		
"South American"	Parry Sound	Separate	4	Ultra Violet apparatus aboard this steamship; water supplied of good quality.
"Kearsarge"	Depot Harbour	Separate	2	Tripure still—water supplied seems good.
"Laketon"	Port Colborne	Combined		Ship has distilling apparatus but is not using it at present.
"Berryton"	Port Colborne	Hodges Still		Ship lives up to Regulations.
"Glenisla"	Port Colborne	Combined		
"Cape Trinity"	Toronto	Combined	2	This is an old ship and needs considerable attention—separate sea-cock. Present system had to be abandoned and York Springs bottled water used for drinking from end of July. Analyses made at City Hall, Toronto, showed water to be foul.
"Claremont"	Toronto	Combined		No separation between pumps for sanitary and drinking services.
"Frank E. Kerby"	Kingsville	Yes	7	Water from city system of Detroit.
"Pelee"	Kingsville	Combined		This SS. carries mail, passengers and express.
"Marquette No. 2"	Erieau	Common sea-cock		Drinking water is passed through "Tripure Still."
"Wm. H. Daniels"	Erieau	Combined		New ship built in Britain in 1923.
"E. P. Osler"	Sault Ste. Marie	Combined		Inspection showed that sanitary system was not posted.
"Sarnian"	Sault Ste. Marie	Combined		
"Greypoint"	Toronto	Combined		Distilling apparatus not being used—needs watching.
"Canadian Engineer"	{ Montreal Fort William }	Combined		Tanks not properly looked after, laboratory report showed Colon in 1 c.c. August 2.
"Miss Vanderburg"	Prescott	Separate		
"Ferdinand"	Prescott	Separate		
"Charles Lyon"	Prescott	To be installed soon		
"Rapids Queen"	Prescott	Yes		Water is obtained from city system of Victoria Pier, Montreal.
"Yenneck II"	Gananoque	Yes		This vessel needs attention, company notified.
"Dalrymple"	Kingston	Combined		No purification provided for aboard this vessel.
"Susie Chipman"	Kingston	Combined		No purification provided for aboard this vessel.
"Waubic"	Kingston	Combined		No purification provided for aboard this vessel.
"Wolfe Islander"	Kingston	No		Proposal to use water from city system of Kingston, Ont.
"Ontario No. 2"	Cobourg	Separate		Water passed through Tripure filters.
"Harrison"	Owen Sound		2	Water of fair quality obtained in Georgian bay. Tanks clean.
"Keenan"	Owen Sound		3	Water of good quality obtained in Georgian bay. Tanks clean.
"Glenellah"	Port Arthur		1	Water of fair quality.
"Pabjune"	Port Arthur		1	Water of good quality.
"Arabian"	Port Arthur		2	Water of variable quality.
"Metcalf"	Port Arthur		1	Water of good quality.
"Turret Court"	Port Arthur		1	Water of good quality.
"Glenfinnan"	Port Arthur		1	Water of good quality.
"Turret Cape"	Port Arthur		1	Water of good quality.

SUMMARY OF SEASON'S WORK, 1923—*Concluded*

Vessels boarded by Health Officials	Port	Had vessel separate supply system	Number of analyses of water supply	Remarks
"Beaverton".....	Port Arthur.....		1	Water foul, shows presence of colon in 1/10th c.c.
"Mariel".....	Owen Sound.....		1	Water of good quality obtained in Georgian bay.
"Grenville".....	Owen Sound.....		1	Water of good quality.
"Wahnapiatae".....	Owen Sound.....		1	Water foul, shows presence of colon in 1/100 c.c.
"Queen".....	Owen Sound.....		1	Water of doubtful quality obtained overboard.
"Primrose"..... "Jasmine"..... "Bluebell"..... "John Hanlan".....	Toronto.....			Steamers of Toronto Ferry Company merely carry water for crew. This is obtained from city of Toronto system.

(12) FINANCIAL STATEMENT

SUMMARY OF EXPENDITURE

Service	Gross Expenditure	Refunds to Appropriations	Net Expenditure
	\$ cts.	\$ cts.	\$ cts.
Foods and Drugs.....	77,750 63	2,228 82	75,521 81
Opium and Narcotic Drugs.....	15,277 98		15,277 98
Proprietary or Patent Medicines.....	2,827 46		2,827 46
Pollution of Boundary Waters.....	2,496 86		2,496 86
Marine Hospitals.....	112,654 35	2,861 33	109,793 02
Quarantine.....	191,159 93	963 33	190,196 60
Leprosy.....	16,613 98	53 29	16,560 69
Public Works Health Act.....	3,436 62	25 59	3,411 03
Immigration Medical Inspection.....	51,839 23	1,840 00	49,999 23
Laboratory of Hygiene.....	9,783 95	138 55	9,645 40
Venereal Diseases.....	186,459 70		186,459 70
Civil Government Salaries.....	140,626 33	25 00	140,601 33
Civil Government Contingencies.....	63,548 12	2,935 70	60,612 42
Provisional Bonus Allowance.....	22,033 74	6 02	22,027 72
Retirement Act, 1920, Superannuation No. 4.....	1,530 00		1,530 00
Canadian National Council of Child Welfare.....	5,000 00		5,000 00
Canadian Social Hygiene Council.....	5,000 00		5,000 00
	908,038 88	11,077 63	896,961 25

STATEMENT OF REVENUE COLLECTED FROM VARIOUS SOURCES FOR THE FISCAL YEAR 1923-24

Service	Total Revenue	Refunds	Net Revenue
	\$ cts.	\$ cts.	\$ cts.
"A"—Food and Drugs.....	6,101 55	5 00	6,096 55
"B"—Opium and Narcotic Drugs.....	20,435 84	1,036 00	19,399 84
"C"—Patent Medicines.....	7,094 00	497 00	6,597 00
"D"—Sick Mariners' Dues.....	173,051 55	732 40	172,319 15
"E"—Casual Revenue.....	3,198 38		3,198 38
	209,881 32	2,270 40	207,610 92

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"A"—FOOD AND DRUGS NET REVENUE FOR 1923-1924.

	Analysis Fees	Penalties	Costs	Total
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Nova Scotia.....	22 00			22 00
New Brunswick.....	20 00	25 00	10 00	55 00
Quebec.....	31 00	1,750 00	650 15	2,431 15
Ontario.....	2,567 00	725 00	128 40	3,420 40
Manitoba.....	82 00			82 00
Saskatchewan.....	6 00			6 00
Alberta.....	3 00			3 00
British Columbia.....	2 00	75 00		77 00
	2,733 00	2,575 00	788 55	6,096 55

"B"—OPIUM AND NARCOTIC DRUGS NET REVENUE, 1923-1924.

	Business Licenses	Import Licenses	Export Licenses	Penalties	Seizures	Total
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Nova Scotia.....	90 00			12 50		102 50
New Brunswick.....	115 00			1,700 00		1,815 00
Quebec.....	1,090 00	485 00	40 00	5,499 00	849 31	7,963 31
Ontario.....	1,080 00	140 00	25 00	1,674 35		2,919 35
Manitoba.....	255 00	5 00		885 00		1,145 00
Saskatchewan.....	100 00			1,625 00		1,725 00
Alberta.....	145 00			1,237 18		1,382 18
British Columbia.....	85 00	5 00		2,257 50		2,347 50
	2,960 00	635 00	65 00	14,890 53	849 31	19,399 84

"C"—PATENT MEDICINES NET REVENUE, 1923-24

	Penalties	Registration Fees at \$2 each	License Fees at \$1 each	Total
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Nova Scotia.....		14 00	55 00	69 00
New Brunswick.....		22 00	138 00	160 00
Prince Edward Island.....			7 00	7 00
Quebec.....		401 00	1,371 00	1,772 00
Ontario.....	35 00	730 00	2,194 00	2,959 00
Manitoba.....		38 00	177 00	215 00
Saskatchewan.....		4 00	25 00	29 00
Alberta.....		58 00	77 00	135 00
British Columbia.....		32 00	142 00	174 00
Foreign.....		220 00	857 00	1,077 00
	35 00	1,519 00	5,043 00	6,597 00

"D"—SICK MARINERS' DUES REVENUE, 1923-1924

	Total Revenue	Refunds	Net Revenue
	\$ cts.	\$ cts.	\$ cts.
Nova Scotia.....	43,492 16	289 30	43,202 86
New Brunswick.....	18,536 34	52 64	18,483 70
Prince Edward Island.....	471 82		471 82
Quebec.....	46,039 66	125 08	45,914 58
British Columbia.....	64,511 57	265 38	64,246 19
	173,051 55	732 40	172,319 15

"E"—CASUAL REVENUE, 1923-24

	Total
	\$ cts.
Sale of Bulletins.....	12 50
Fumigation Certificates.....	30 00
Miscellaneous refunds to previous years appropriations.....	3,155 88
	3,198 38